

THE ALMANAC

OF THE CANNING, FREEZING, PRESERVING INDUSTRIES

SEVENTY-FOURTH EDITION, PUBLISHED AT WESTMINSTER, MARYLAND

1989

SECTION INDEX

Detailed Index to Contents	3
I—Association and FDA Personnel	14
II—Food Law and Regulations	31
III—Labeling and Packaging	88
IV—Emergency Permits, FDA Good Mfg. Practice, USDA Canning Regs., Frozen Food Code.	168
V—FDA Standards of Identity, Quality, Fill	238
VI—USDA Quality Grade Standards	352
VII—Raw Product Statistics	510
VIII—Pack Statistics, U.S.	546
IX—International Trade and World Packs	604
X—Canned Food Prices	625
XI—Appendix	631
XII—Buyers Guide, Machinery, Supplies, Services. . .	651

Since 1916— The Industry's Indispensable Reference Manual

THE ALMANAC

OF THE CANNING, FREEZING, PRESERVING INDUSTRIES

1989

**74th Annual Compilation of Basic References for
the Canning, Freezing, Preserving
and Allied Industries**

•
\$39 in USA
\$47 outside USA

Copyright© 1989 by Edward E. Judge & Sons, Inc.

**EDWARD E. JUDGE & SONS, INC.
P.O. BOX 866
WESTMINSTER, MD 21157
U.S.A.**

Tel. 301-876-2052

INDEX TO CONTENTS

(See also pages 32 & 33)

The section index on the front cover reveals the basic layout of this reference. Additionally, there's an index on the first page of the larger sections, and an index to the Buyer's Guide. Indices to the Food & Drug Act and the Code of Federal Regulations appear on pages 32 and 33.

In this detailed index, the editors have made every effort to cross index as far as possible without making it too bulky and cumbersome. The volume of detail included in this work, however, creates a near impossible indexing problem.

For best results new users are urged to spend some time familiarizing themselves with Almanac contents.

Bear in mind that this 74th edition, with the exception of some last minute changes where noted, is updated to May 15, 1989.

ACIDIFIED FOODS	228
ACREAGE, Veg. for Processing	511
ADDITIVE, Definitions	34, 61
ADDITIVES, Color	75
ADDITIVES, Food (Sec. 409)	56
ADDRESSES, Assn. Officers	14
ADDRESSES, Food & Drug Offices	27
ADDRESSES, U.S.D.A., Grading Offices	355
ADULTERATED FOOD	42
ADVERTISING AND MISBRANDING	83
ALCOHOL - Insoluble solids test, peas	325
APPENDIX	631
APPENDIX A - Part 101	129
ARBITRATION	355
ARTIFICIAL SWEETENERS	65, 67, 92
ASPARTAME	65
ASSOCIATIONS OF THE INDUSTRY	14
AUTHORITY, FDA	71
BABY FOOD LABELING	141
BUYER-SELLER GUARANTEE	90, 91
BUYER'S GUIDE - Machinery supplies	
Services	651
CAN PRICES	165, 166
CAN SHIPMENTS	167
CAN SIZE CONVERSION	162
CANCER CLAUSE	57, 76
CANNED FOOD PRICES	625
CANNING REGS. - U.S.D.A.	192
CASE EQUIVALENTS, Various Size Cans	163
CASE SHIPPING WEIGHTS	635, 636
CATEGORIES, FOOD	61
CENSUS, Industry	597, 646
CHOLESTEROL, Labeling	108, 119, 120
CODEX REVIEW	239
COLOR ADDITIVES	75
COMMON OR USUAL NAMES (Part 102)	131
Beverages, Orange Juice, dil. (\$102.32)	134
Beverages, non carbonated (\$102.30)	134
Beverages, diluted, other (\$102.33)	134
Bonito (\$102.47)	136
Clams, Fried (\$102.49)	136

Crabmeat (\$102.50)	136
Dinners, Main Dishes (\$102.28)	133
Dinners, Froz. Heat & Serve (\$102.26)	132
Fat and Oil Mixtures (\$102.37)	135
Fish Sticks or Portions (\$102.45)	135
Onion Rings (\$102.39)	135
Pacific Whiting (\$102.46)	136
Peanut Spreads (\$102.23)	132
Potato Chips from dried pot. (\$102.41)	135
Protein substitutes (Vegetable)	136
Seafood Cocktails (\$102.54)	136
Shrimp Units, non-stdized. (\$102.55)	136
Turbot, Greenland (\$102.57)	136
COMPLIANCE, FDA STDS.	247
COMPLIANCE, U.S.D.A. GRADE	357
CONSUMPTION (per capita)	
CANNED, FROZEN, FRESH FOOD	640
CONTAINER SIZE CONVERSION	162
CONTAMINANTS, UNAVOIDABLE	179
CONVENTION CITIES	12, 13, 14
CONVENTION DATES AND CITIES,	
ASSOCIATION	12, 13, 14
CONVERSION FACTORS	
Various Size Cases	163
Can and Glass	162
Metric System Equivalents	632
Raw and Processed Weight Equiv.	633, 634
CROP STATISTICS, Vegetables-	
Acreage, Yield, Production, Price paid	
to growers, Value	510
Asparagus	529
Beans, Snap	511
Broccoli	530
Carrots	531
Cauliflower	533
Corn, Sweet	515
Mushrooms	535
Peas	519
Pickles (cucumbers)	517
Sweet Potatoes	534
Tomatoes	522
Summary-by-commodity	525

INDEX TO CONTENTS—Continued

CROP STATISTICS, VEGETABLE—Continued

Summary-by-State..... 526, 527, 528

CROP STATISTICS, FRUIT-

Utilization Price, Value..... 536

Apples..... 536

Apricots..... 542

Cherries..... 538, 539

Cranberries..... 542

Grapefruit..... 541

Olives, California..... 543

Oranges..... 540

Peaches..... 543

Pears..... 544

DEFECTS, UNAVOIDABLE..... 43, 179, 191

DEFINITIONS, Additives..... 34, 61

DEFINITIONS, Chap. II FFD&CA..... 34

DEFINITIONS, Labeling..... 97, 98

DEFINITIONS (Part 113)..... 210

DEFINITIONS (Part 114)..... 228

DEFIN. AND PROCEDURES (Part 145)..... 246

DEFIN. AND PROCEDURES (Part 155)..... 299

DEFINITIONS AND STDS. (Part 130)..... 239

DELANEY CLAUSE..... 57

DENSITY, SYRUP... 246, 357 and Indiv. Std.

DESCRIPTIVE LABELING..... 145

DIETARY FOOD REGS (Part 105)..... 141

DRAINED WT. DETERMINATION... 247, 356

DRAINED WEIGHT TABLES... Indiv. Grade

EMERGENCY PERMIT CONTROL... 43, 168

ENERGY CONSUMED..... 603

EPA REFERENCES..... 48, 49, 52, 183

EQUIPMENT & PROCEDURES, low acid

foods, GMP's - (\$113.40)..... 212

EXEMPTIONS (\$101.9, 101.100)..... 111, 122

EXPENDITURES, Food..... 644

EXPERIMENTAL PACKS..... 243

EXPORT MARKETS - U.S..... 610, 611

EXPORTS CANNED & FROZEN..... 605

FACTORY INSPECTION..... 74

FAIR PACKAGING & LABELING ACT... 94

FAT AND FATTY ACIDS (\$101.25)..... 120

FEDERAL FOOD, DRUG &

COSMETIC ACT AND REG... 31, 32, 33, 34, 91

FDA DEFINITIONS AND PROCEDURES

(Part 145)..... 246

FDA FIELD OFFICES & INSPECTORS... 27

FDA STANDARDS, IDENTITY, QUALITY

FILL..... 239

FDA/USDA/EPA working relationship... 49

FILL OF CONTAINER... 241, 242, 356, Indiv. Std.

FILL WEIGHT..... Indiv. Fruit Grade

FISH GRADES (U.S.), FROZEN (Ref.)... 505

FISH INSPECTION..... 74, 344

FOOD ADDITIVE REGS..... 59

FOOD ADDITIVES..... 34, 56, 59, 75, 244

FOOD ADDITIVES IN STANDARDIZED

FOODS..... 63

FOOD & DRUG OFFICES..... 27

FOOD CATEGORIES..... 61

FOOD LAW & REGULATIONS..... 31

FOOD & DRUG REGS-FFD&CA and FPLA... 98

FOODSERVICE ANALYSIS..... 645

FORTIFICATION POLICY..... 138

FROZEN FOOD HANDLING CODE..... 232

FROZEN DINNERS..... 132, 139

FROZEN FOOD PACKS..... 580

FUELS & ELEC. ENERGY CONSUMED... 603

GLASS CONTAINER SHIPMENTS..... 167

GOOD MANUFACTURING

PRACTICES..... 168-232

Aseptic Processing..... 220

Coding..... 224

Containers..... 223

Continuous Agitating Retorts..... 217

Discontinuous Agitating Retorts... 218, 219

Part 108-Emergency Permit..... 168

Part 110-Sanitation..... 184

Part 113-Low Acid Foods..... 210

Part 114-Acidified Foods..... 228

Part 118-Cacao Products-Source ref. only... 232

Part 123-Frozen Raw breaded shrimp... 232

Part 129-Bottled Drk. Water-(source ref.)... 232

Personnel (Sanitation)..... 185, 188, 209

Pet Foods (Same as Part 113)..... 210

Plants & Grounds..... 186

Process & Controls..... 188, 225, 228

Product Preparation..... 225

Records, Processing, Production... 174, 227

Retorts, Continuous agitating..... 217

Retorts, Discontinuous agitating... 218, 219

Retorts, Flame Sterilizer..... 223

Retorts, Hydrostatic..... 220

Retorts, Still..... 212, 215

Sanitary Facilities..... 187

Sanitary Operations..... 186

Warehousing/Distrib..... 190

Water Activity..... 223

GOVERNMENT PURCHASES..... 637, 639

GRADE DETERMINATION..... 357

GRADE IDENTIFICATION MARKS..... 358

GRADE STANDARDS (U.S.D.A.)-

CANNED FOODS..... 352

Apples..... 362

Apple Juice..... 363

Applesauce..... 365

Apricots..... 367, 371

Asparagus..... 373

Beans, Baked..... 383

Beans, Dried..... 381

Beans, Lima..... 386

Beans, Snap..... 379

Beets..... 388

Carrots..... 390

Cherries, RTP..... 392

Cherries, Sweet..... 394

Corn, C.S..... 398

Corn, W.K..... 400

Drained Weight Determination... 247, 356

Fish Grades (U.S. Frozen, Reference) ... 505

Fruit Cocktail..... 402

Fruits for Salad..... 406

General Requirements..... 356

Grades Issued, List of..... 353

Grading Offices..... 355

Grapefruit..... 409

Grapefruit Juice..... 411

Grapefruit-Orange Juice..... 414

Identification Marks..... 358

Jelly, Fruit..... 405

Mushrooms..... 416

Orange Juice..... 418

Peaches, Cling..... 421

Peanut Butter..... 426

Pears..... 428

INDEX TO CONTENTS—Continued

GRADE STANDARDS (USDA)—Continued

Peas.....	431
Peas, Blackeye.....	433
Pickles.....	434
Pimientos.....	439
Pineapple Juice.....	443
Pork & Beans.....	385
Potatoes, Sweet.....	445
Potatoes, White.....	449
Preserves, Jams.....	454
Sampling Plans.....	358
Sanitation, Plant.....	184, 361
Sardines, Maine (Not U.S.).....	505
Sauerkraut.....	458
Sirup Density.....	246, 357 and Indiv. Std.
Spinach.....	460
Tangerine Juice.....	466
Tomatoes.....	466
Tomato Catsup.....	468
Tomato Juice.....	470
Tomato Juice Concentrate.....	471
Tomato Paste.....	472
Tomato Puree (Pulp).....	472
Tomato Sauce.....	474

GRADE STANDARDS (U.S.D.A.)—

FROZEN FOODS.....	475
Beans, Snap.....	475
Beans, Lima.....	479
Broccoli.....	480
Carrots.....	485
Cherries.....	489
Corn, W.K.....	490
Corn-on-the-Cob.....	491
Grapefruit Juice.....	411
Leafy Greens.....	495
Orange Juice Concentrated.....	418
Peas.....	497
Pineapple Juice.....	443
Potatoes, French Fried.....	499
Potatoes, Hash Brown.....	502
Spinach.....	495
Strawberries.....	504
Tomato Juice.....	470

GRADES ISSUED, LIST.....

GRADES (U.S.) FROZEN FISH (Ref.).....	505
---------------------------------------	-----

GRADES, Maine Sardine.....	505
----------------------------	-----

GRAS ELIGIBILITY (§170.30).....	64
---------------------------------	----

GRAS LIST REVIEW.....	59
-----------------------	----

GROWERS PRICES, CANNING CROPS.....	510
------------------------------------	-----

GUARANTEE, BUYER-SELLER.....	90, 91
------------------------------	--------

HEADSPACE.....	357
----------------	-----

HEARINGS, FDA.....	39, 57
--------------------	--------

IDENTITY STANDARDS, FDA.....	238
------------------------------	-----

IMPORTS & EXPORTS (LAW).....	84
------------------------------	----

IMPORTS, CANNED FOODS, U.S.....	607, 612
---------------------------------	----------

IMPORTS, OTHER COUNTRIES.....	613
-------------------------------	-----

INDEX, Code of Fed. Reg. Parts 1-199.....	33
---	----

INDEX, FFD&CA.....	32
--------------------	----

INFANT FORMULA

(Ref. only-Parts 106 & 107).....	144
----------------------------------	-----

INFANT FORMULA ACT, (Ref.).....	35, 70
---------------------------------	--------

INFORMATION PANEL ON LABEL.....	100
---------------------------------	-----

INGREDIENT FUNCTIONS.....	62
---------------------------	----

INGREDIENT LABELING.....	103, 106
--------------------------	----------

INGRED. IN STANDARDIZED FOODS.....	106
------------------------------------	-----

INJUNCTION PROCEEDINGS.....	36
-----------------------------	----

INSPECTION, FDA.....	74, 344
----------------------	---------

INSPECTION, USDA.....	354
-----------------------	-----

INTERIM ORDERS.....	67
---------------------	----

INTERNATIONAL TRADE.....	604
--------------------------	-----

IRRADIATION (Part 179).....	66
-----------------------------	----

LABEL MEASUREMENT.....	164
------------------------	-----

LABELING & PACKAGING.....	88
---------------------------	----

Agreement.....	90, 91
----------------	--------

Artificial Coloring.....	92, 177
--------------------------	---------

Artificial Flavoring.....	92
---------------------------	----

Baby Foods.....	141
-----------------	-----

Caloric Intake or body weight.....	142
------------------------------------	-----

Chemical Preservatives.....	92
-----------------------------	----

Cholesterol.....	108, 119, 120
------------------	---------------

Colorings.....	92, 116
----------------	---------

Common or Usual Names (Part 102).....	131
---------------------------------------	-----

Conspicuousness.....	91
----------------------	----

Container Size Conversion.....	162
--------------------------------	-----

Contents, Statements, Net.....	124, 128, 153
--------------------------------	---------------

Descriptive Labeling Recommendations.....	145
---	-----

Diabetics, Labeling.....	143
--------------------------	-----

Dietary Foods (Law & Reg)(Part 105).....	141
--	-----

Exemptions.....	93, 111, 122, 128
-----------------	-------------------

Experiments, Temporary (§101.108).....	128
--	-----

Fair Packaging & Labeling Act.....	94
------------------------------------	----

Fat and Fatty Acids §101.25.....	120
----------------------------------	-----

Flavorings.....	92, 116
-----------------	---------

Fortification Policy §104.20.....	138
-----------------------------------	-----

Frozen Dinners.....	132, 139
---------------------	----------

Fruit Juices (imported conc.).....	104
------------------------------------	-----

Health Messages.....	112
----------------------	-----

Imitation.....	91, 102
----------------	---------

Infant Food §105.65.....	141
--------------------------	-----

Information Panel.....	100
------------------------	-----

Ingredients, (§101.4), (§101.6).....	103, 106
--------------------------------------	----------

Kosher Foods §101.29.....	121
---------------------------	-----

Label Measurement.....	164
------------------------	-----

Labeling Experiments (§101.108).....	128
--------------------------------------	-----

Labeling Regulations.....	98
---------------------------	----

Labeling Regs.-Effective dates.....	88
-------------------------------------	----

Misbranding (§403).....	91, 116
-------------------------	---------

Monosodium glutamate (§101.35).....	121
-------------------------------------	-----

Name and address.....	91
-----------------------	----

Net Contents Statements.....	124, 152
------------------------------	----------

Net Contents Variation.....	
-----------------------------	--

(Proposed §101.106) reference.....	128
------------------------------------	-----

Nonstandardized Foods, Part 102B.....	132
---------------------------------------	-----

Nutrition Labeling (§101.9).....	107
----------------------------------	-----

Nutritional Quality Guidelines (Part 104).....	137
--	-----

Order.....	108
------------	-----

Peanut Spreads (§102.23).....	132
-------------------------------	-----

Potassium.....	110
----------------	-----

Preservatives.....	92
--------------------	----

Principal Display Panel.....	100
------------------------------	-----

Prominence.....	114
-----------------	-----

Quantity Statement.....	107, 152
-------------------------	----------

Regulations enforcement.....	98
------------------------------	----

Responsibility for Correct Labels.....	89
--	----

Restaurant Foods.....	113
-----------------------	-----

Saccharin.....	92
----------------	----

Sample Labels.....	148, 149, 150
--------------------	---------------

Servings, Number of.....	106
--------------------------	-----

Shipment of Unlabeled Goods, agreement.....	90
---	----

Sodium Content Labeling.....	110, 113, 144
------------------------------	---------------

Sodium, Salt.....	144
-------------------	-----

Solid Content wt. declaration proposal.....	
---	--

(footnote ref. only).....	124
---------------------------	-----

INDEX TO CONTENTS—Continued

LABELING—Continued

Spices, Flavorings, Colorings.....	116
Sub-Standard Label Legend.....	242
Sulfite Determination.....	129
Sulfites in standardized foods.....	240
Sulfiting agents §101.100(a)(4).....	122
Surimi.....	103
Warning Statements §101.17.....	115
Weights, Drained.....	Sec. VI
Weights, Label (net content).....	152
LOT COMPLIANCE.....	357
LOW-ACID FOODS.....	171, 210
MEAT & POULTRY CANNING	
REGULATIONS-USDA.....	641
METRIC SYSTEM EQUIVALENTS.....	632
MICROBIOLOGICAL STANDARDS,	
RECOMMENDED, Reference only.....	137
MISBRANDED FOODS (§403 FFD&CA).....	91
MISBRANDING (§101.18).....	116
MILITARY PURCHASES.....	637, 639
MOLD COUNT & ROT (§100.145).....	316
MONIER WILLIAMS PROCEDURE.....	129
NET CONTENTS DECL.....	124, 152
NUTRITIONAL LABELING (§101.9).....	107
NUTRITIONAL QUALITY GUIDELINES	
(Part 104).....	137
NUTRITIVE SWEETENERS-	
DEFINITIONS & STDS.....	338
NUTRITIVE SWEETENERS IN DIET	
BEVERAGES (§100.130).....	68
OYSTERS, CANNED INSPECTION.....	344, 361
PACK STATISTICS, U.S.—CANNED	
FISH - BY STATE.....	574
Clams.....	573
Crabmeat.....	573
Oysters.....	573
Salmon.....	575
Sardines, Maine.....	573
Shrimp.....	573
Tuna.....	576
Other (incl. specialties).....	573
PACK STATISTICS, U.S.—CANNED	
FRUIT & FRUIT JUICE.....	565
Apples.....	565, 599, 600
Apple Juice.....	566, 600
Applesauce.....	566, 599
Apricots.....	567
Baby Food*.....	579, 598
Blackberries*.....	565, 599
Blueberries*.....	565, 599
Cherries, Red Tart.....	568
Cherries, Sweet.....	568
Cranberry Sauce.....	565, 599
Fruit Cocktail.....	569
Fruits for Salad.....	569
Grapefruit*.....	569
Grapefruit Juice.....	570, 600
Grapefruit-Orange Juice.....	570
Mixed Fruits.....	569
Olives, Ripe & Green Ripe.....	578
Orange Juice.....	570
Peaches.....	571
Pears.....	572
Pie Fillings, fruit.....	578, 599
Pineapple & Pineapple Juice.....	565, 599, 617
Plums.....	572

Prune Juice.....	579, 600
Summary All Fruits, Tots.....	565
PACK STATISTICS, U.S.—CANNED	
MEATS.....	577
Meat Sauces.....	578
PACK STATISTICS, U.S.—CANNED	
SPECIALTIES*.....	578, 579
Baby Food.....	579
Barbecue Sauce.....	564
Beans, Baked.....	578
Beans, Dry.....	578
Hominy.....	578
Jams & Jellies.....	578
Juices, other.....	579
Mushrooms.....	578
Mustard.....	578
Peanut butter.....	578
Pickles.....	578
Poultry.....	579
Vinegar & Cider.....	578
PACK STATISTICS, U.S.—CANNED	
VEGETABLES.....	547
Asparagus.....	548
Beans, Green.....	549
Beans, Lima.....	551
Beans, Wax.....	549
Beets.....	552
Carrots.....	552
Chili Sauce.....	563
Corn.....	553
Greens, Leafy*.....	547
Okra*.....	547
Peas.....	555
Peas, Blackeye.....	558, 599
Peas, Field.....	558, 599
Peas and Carrots.....	547, 599
Pimientos*.....	547
Potatoes, Sweet.....	559
Potatoes, White.....	559
Pumpkin.....	558, 599
Sauerkraut.....	560
Spinach.....	560, 599
Succotash.....	547, 599
Summary All Veg. Tots.....	547
Tomatoes.....	561
Tomato Catsup.....	563
Tomato Juice.....	563, 599
Tomato Paste.....	562
Tomato Pulp (Puree).....	564
Tomato Sauce.....	564, 600
PACK STATISTICS, U.S.—CONVENIENCE	
MEAT PRODUCTS.....	577
Dinners.....	577
Entrees.....	577
Pies.....	577
Pizza.....	577
PACK STATISTICS, U.S.—FROZEN	
FRUITS.....	591
Apples.....	591
Blackberries.....	592
Blueberries.....	593
Cherries, RSP.....	592
Juices, Citrus & non citrus.....	594
Peaches.....	592

*Pack figures for recent years not available.

INDEX TO CONTENTS—Continued

PACK STATS—FROZEN FRUIT—Continued		PRINCIPAL DISPLAY PANEL-LABEL	100
Raspberries, Red	593	PRIOR SANCTION	61
Strawberries	593	PROCESS FILING	172
Summary	591	PROHIBITED ACTS, FDA	35
PACK STATISTICS, U.S.—FROZEN		PRODUCTION, CANNERS CROPS	510
VEGETABLES	580	QUALITY GRADES, U.S.D.A.	352
Asparagus	581	QUALITY GUIDELINES, NUTRITIONAL	137
Beans, Green	581	QUALITY STANDARDS, FDA	238
Beans, Italian	581	RAW PRODUCT CONTAMINATION	
Beans, Lima	582	PREVENT	52
Beans, Wax	582	RAW PRODUCT STATISTICS	510
Broccoli	583	RECALL GUIDELINES (FDA)	175
Brussels Sprouts	583	RECORDS, INTERSTATE SHIPMENT	74
Carrots	584	REDNESS DEFINED	299
Cauliflower	585	REGISTRATION, PLANT	172
Corn	585	REGULATORY ACTIVITIES -	
Mixes	590	AGENCY AGREEMENT	49
Okra	586	ROT, TOMATO (\$100.145)	316
Onions	586	SACCHARIN	67, 92
Peas	587	SALT	144, 299, 324
Peas, Blackeye	587	SAMPLE LABELS	149, 150
Potatoes	588	SAMPLING	247, 358
Pumpkin & Squash	588	SANITATION, GMP (Part 110)	184
Spinach	588	SANITATION REQUIREMENTS, FDA	
Squash, Summer	589	and USDA	184, 361
Summary, All Veg. Totals	580, 581	SARDINE GRADES	505
Zucchini	589	SEAFOOD INSPECTION	74, 344
PACK STATISTICS, U.S.—FROZEN		SEIZURE	38
SPECIALTIES	579	SHIPPING WEIGHTS, CASES	635, 636
Baked Goods	579	SHIPMENT RECORDS (LAW)	74
Dinners, Pies, etc.	579	SHRIMP INSPECTION	344
PACK STATISTICS, WORLD—CANNED	621	SHRIMP STANDARDS (FDA)	329
Argentina	621	SIRUP DENSITY	246, 357 and Indiv. Std.
Australia	621, 622	SODIUM (salt)	110, 113, 144, 146
Canada	621, 622, 623, 624	SOLUBLE SOLIDS, DEFINED	299
Chile	621	STANDARDS OF IDENTITY, QUALITY,	
France	622, 623, 624	AND FILL OF CONTAINER FOR CANNED	
Germany, West	621, 622, 623	AND FROZEN FOODS, FDA	238
Greece	622, 623	Applesauce	249
Italy	622, 623, 624	Apricots	250
Ivory Coast	622	Artichokes	317
Japan	621, 623	Asparagus	317
Korea, Rep.	623	Bean Sprouts	317
Mexico	622, 624	Beans, Butter	317
Philippines	622	Beans, Lima	317
Portugal	623, 624	Beans, Shelled	317
South Africa	622	Beans, Green & Wax	300
Spain	621, 623, 624	Beets	317
Taiwan	622, 623	Beet Greens	317
Thailand	622	Berries	252
Turkey	624	Broccoli	317
United Kingdom	623, 624	Brussels Sprouts	317
United States	546, 622	Cabbage	317
PACKAGING SECTION	88	Cane Sirup	340
PCB's	182, 183	Carrots	317
PENALTIES, FDA	36	Cauliflower	317
PER CAPITA CONSUMPTION	640	Celery	317
PESTICIDE REFERENCES	48, 49	Cherries	254
PESTICIDES, NFPA'S PROTECTIVE		Cherry Pie, Frozen	298
SCREEN PROGRAM	52-54	Collards	317
PESTICIDES (§ 408)	44	Corn	304
PESTICIDES IN PROCESSED FOOD	64	Dandelion Greens	317
PRESIDENTS, NAT'L ASSN'S	12	Definitions and Standards (Part 130)	240
PRICES, CAN.	165, 166	Definitions and Procedures (Part 145)	246
PRICES, CANNED FOODS	625	Definitions (Part 155)	299
PRICES, FRUIT CROPS	536	Dextrose	338
PRICES, PAID GROWERS	510	Experimental Packs, Temp. permits	243

INDEX TO CONTENTS—Continued

Figs.....	257	Truffles.....	318
French Dressing.....	342	Tuna, Canned.....	332
Fruit Butters.....	291	Turnip Greens.....	318
Fruit Cocktail.....	260	Turnips.....	338
General Regulations (Part 130).....	239	Subpoenas.....	42
Glucose.....	339	Tolerance for Poisonous Ingredients.....	43
Grapefruit.....	264	Tolerances- Unavoidable Defects.....	179, 191
Grapefruit Juice.....	283	Vegetables, Misc.....	317
Grapes.....	262	Violations, Minr., Report of.....	42
Jams or Preserves.....	295, 297	STANDARDS, QUALITY GRADE	
Jellies.....	292, 294	See GRADE STDS., U.S.D.A.....	352
Kale.....	317	STOCKS & SHIPMENTS, Canned & Frozen	
Lactose.....	339	Apples.....	595
Lemon Juice.....	281	Apricots.....	567, 595
Lemonade, Frozen Concentrate.....	282	Asparagus.....	548
Maple Syrup.....	342	Beans, Green & Wax.....	550, 582
Mayonnaise.....	342	Beans, Lima.....	551
Milk.....	245	Blackberries.....	596
Mushrooms.....	320	Blueberries.....	596
Mustard Greens.....	317	Broccoli.....	583
Nutritive Sweeteners.....	338	Carrots.....	584
Okra.....	317	Cherries.....	595
Onions.....	317	Corn.....	555, 586
Optional Ingredients.....	FDA Product Std.	Peaches.....	571, 595
Orange Juice & Products.....	284	Peas.....	558, 587
Oysters.....	326	Raspberries.....	596
Parsnips.....	318	Spinach.....	589
Peaches.....	266	Strawberries.....	595
Peanut Butter.....	338	Tomatoes.....	562
Pears.....	270	SUBSTANDARD STATEMENTS.....	242
Peas, Blackeye.....	318	SUGARS AND SIRUPS DEFINITION.....	246, 338
Peas, Green, Canned.....	307, 309	SULFITE DETERMINATION	
Peas, Green, Frozen.....	324	Monier-Williams (modified).....	129
Peas, Field.....	318	SULFITES (labeling).....	122, 240
Peppers, Green Sweet, Red Sweet.....	318	SURIMI.....	103
Pimientos.....	318	TELEPHONE NOS., ASSN. OFFICES.....	14
Pineapple.....	273	TELEPHONE NOS., FDA OFFICES.....	27
Pineapple Juice.....	288	TELEPHONE NOS., U.S.D.A. GRADING	
Plums.....	277	OFFICES.....	355
Potatoes, White.....	318	TEMPORARY PERMITS (§130.17).....	243
Potatoes, Sweet.....	318	TIN PLATE COATING WEIGHTS.....	164
Preserves, Jams.....	295, 297	TOLERANCES, FDA, NATURAL &	
Prunes.....	279	UNAVOIDABLE SUBSTANCES.....	43
Prune Juice.....	290	UNAVOIDABLE DEFECTS.....	43, 179, 191
Rutabagas.....	318	U.S. CENSUS (Canned, Glasspacked,	
Salad Dressing.....	343	Frozen Foods).....	597
Salmon, Canned.....	328	U.S.D.A. INSPECTION OFFICES.....	355
Salsify.....	318	U.S.D.A. INSPECTION SERVICE.....	354
Sampling and Acceptance Procedures.....	247	U.S.D.A. QUALITY GRADE STANDARDS,	
Shrimp, Canned.....	329	(Voluntary).....	352
Shrimp, Frozen Breaded.....	329	U.S. FOOD & DRUG DISTRICT OFFICES.....	27
Sirups.....	338	UTILIZATION FRUIT CROPS.....	536
Sorghum Sirup.....	340	VALUE OF PROCESSING CROPS.....	510
Spinach.....	318	VALUE OF FRUIT CROPS.....	536
Sub-Standard Label Legend.....	242	VITAMINS & MINERALS.....	70
Sugars & Syrups Definitions.....	246, 338	WATER ACTIVITY DEFINED §114.3(h).....	228
Sweeteners, Nutritive.....	338	WATER CAPACITY, DETERMINING	
Sweet Potatoes.....	318	(§130.12).....	241
Swiss Chard.....	318	WATER, bottled (ref.).....	232
Table Sirups.....	340	WEIGHTS	
Tomatoes.....	310	Drained Weight Determination.....	247, 356
Tomato Catsup.....	314	Drained Weights.....	Indiv. Grade
Tomato Concentrates.....	312	Fill Weight.....	Indiv. Fruit Grade Stds.
Tomato Juice.....	312, 321	Label Weights.....	152
Tom. Juice Conc.... See "Tomato Concentrates"		Shipping Weights, Cases.....	635
Tomato Paste.... See "Tomato Concentrates"		WORLD PACKS.....	621, 623
Tom. Puree, Pulp... See "Tomato Concentrates"		YIELD PER ACRE CANNERS CROPS.....	510

THE ALMANAC

OF THE CANNING, FREEZING, PRESERVING INDUSTRIES

Section III LABELING AND PACKAGING

See also FFD&CA SECTION INDEX and CFR PART INDEX on pages 32 and 33

REFERENCES IN THIS SECTION

CAN & GLASS CONTAINER SHIPMENTS	167
CAN PRICES	165, 166
CASE EQUIVALENTS	163
CONTAINER SIZE CONVERSION	162
TIN PLATE COATING WTS.	164

LABELING

Cholesterol	108, 119, 120
Common or Usual Name (Part 102)	131
Descriptive Labeling	145
Dietary Foods (Part 105)	141
Exemptions, Nutrition Labeling	111
Exemptions, General (§101.100)	122
Fair Packaging & Labeling Act	94
Fat and fatty acids, cholesterol (§101.25)	120
Information Panel (§101.2)	100
Ingredients (§101.4)(§101.6)	103, 106
Label Measurements	164
Misbranded Food (§403)	91, 116
Net Contents	124, 152
Nutrition Labeling (§101.9)	107

Nutritional Quality Guidelines (Part 104)	137
Principal Display Panel (§101.1)	100
Regulations Under FD&CA & FPLA	98
Saccharin	92
Sample Label	148, 149, 150
Sodium Content Labeling	110, 113, 144
Sulfite Determination	129
Sulfiting Agents (§101.100 (a)(4))	122
Surimi	103
Weights, Label	152

REFERENCES IN OTHER SECTIONS

CFR (Regulations) Index Part 1-199	33
FFD&CA Chapter Index	32
Food, Drug & Cosmetic Act	34, 91
Standards, Identity, Quality, Fill	238
Substandard Labels, Legend	242
U.S. Grade Standards	352
WEIGHTS, Case Shipping	SEC. XI
WEIGHTS, Drained	SEC. VI

MANDATORY UNIFORM EFFECTIVE DATES FOR LABELING REGS.

(53 FR 44861, 11/7/88)

- (1) January 1, 1991, for all final orders published (FR) after January 1, 1988, and before January 1, 1990.
- (2) January 1, 1989, for all final orders which specified January 1, 1989 as the effective date.
- (3) Earlier effective dates (e.g. July 1, 1987) not affected.
- (4) Regulations involving special circumstances justifying a different effective date will have the effective date specified in the order.

INTRODUCTION

In a publication of this kind, there are necessarily many cross references having to do with so important a subject as labeling and packaging. As an example Section V, "Standards of Identity, etc." contains labeling regulations for each of the specific products standardized. And there are many other such instances. As far as possible, however, without seriously disturbing the continuity of other

sections, many of the major references to Labeling and Packaging have been grouped in this section under main headings. To facilitate reference to other important labeling matters that could not be brought into this section, indexes are provided above and under main headings where necessary, in addition to the General Index in the front of this Almanac and the CFR Part Index at the beginning of Section II.

CAN PRICES

(Per 1000 cans)

Prices, 1931 thru 1947, are for hot dip cans basis 1.50 lbs. tin per base box throughout. Since the advent of electrolytic tin plating during World War II, very few commodities are packed in cans made entirely by the hot dipped process. See description of symbols at end of table. Prices FOB Baltimore at time of shipment, no discounts reflected; thru 1971 during seasonal packs; 1972-75 avg. yearly price; 1976-80 during seasonal packs, 1981 and thereafter effec. April 1. Beginning 1986 prices are estimated.

Year	8Z Tall 211x304	No. 1 Pic 211x400	No. 303 303x406	No. 2 307x409	No. 2½ 401x411	No. 3 cyl. 404x700	No. 10 603x700
1931.....		\$14.40		\$19.99	\$25.21	*\$27.19	\$60.33
1932.....		13.95		19.32	24.36	*26.24	58.46
1933.....		13.05		17.97	22.66	*24.34	54.71
1934, 1935 and 1936.....		14.85		20.67	26.06	*28.14	62.21
1937.....		13.66		19.02	23.06	*25.89	57.23
1938.....		14.56		20.32	24.71	*27.79	60.93
1939.....		13.93		19.41	23.66	*26.46	58.34
1940 thru 1946.....		13.85		19.00	22.60	*26.46	57.20
1947.....		16.05		21.63	26.19	40.93	65.69
1948 Hot Dipped, 1.50.....		18.24		24.61	30.05	46.26	74.51
1948 Electrolytic, .50 i.e.....		17.80		23.78	29.41	45.83	75.09
1950 Hot Dipped, 1.50.....		19.89	24.75	26.75	32.88	50.12	81.05
1950 Electrolytic, .50 i.e.....		19.27	23.69	25.66	31.91	49.23	80.89
1952 Hot Dipped, 1.50.....		22.49	27.95	30.62	37.95	57.34	92.68
1952 Electrolytic, .50 i.e.....		21.27	26.25	28.64	35.66	54.73	89.56
1957 Hot Dipped, 1.50.....	24.97	27.50	34.24	37.48	47.73	72.29	117.01
1957 Electrolytic, .50 i.e.....	23.93	26.30	32.60	35.68	45.53	69.72	113.93
1957 Electrolytic, .25 i.e.....	23.65	25.87	32.02	35.04	44.72	68.60	112.09
1957 Differential.....	23.59	25.94	32.18	35.18	44.79	68.33	110.97
1961 Hot Dipped, 1.50.....	24.82	29.20	33.61	38.03	47.98	76.30	124.08
1961 elect. #25 E.I.....	23.47	27.64	31.43	35.53	45.07	72.65	119.26
1961 diff. B 50/25; E 25 i.e.....	23.84	28.06	32.00	36.18	45.87	73.77	121.11
1961 diff. B 75/25; E 25 i.e.....	23.39	27.57	31.42	35.48	44.86	72.03	117.53
1961 diff. B 100/25; E 25 i.e.....	23.48	27.68	31.57	35.64	45.05	72.34	117.97
1963 Hot Dipped, 1.50.....	25.65	30.29	34.81	39.43	49.64	77.17	126.44
1963 elect. #25 E.I.....	24.30	28.73	32.63	36.93	46.73	73.52	121.62
1963 diff. B 50/25; E 25 i.e.....	23.86	28.22	32.02	36.24	45.76	71.66	118.13
1963 diff. B 75/25; E 25 i.e.....	24.22	28.66	32.64	36.88	46.52	72.90	119.89
1963 diff. B 100/25; E 25 i.e.....	24.31	28.77	32.77	37.04	46.71	73.21	120.33
1963 elect. #25 E.I.*.....	23.74		31.64				
1963 diff. B 50/25; E 25 i.e.*.....	23.30		31.03				
1963 diff. B 75/25; E 25 i.e.*.....	23.66		31.63				
1963 diff. B 100/25; E 25 i.e.*.....	23.75		31.78				
1967 elect. #25 E.I.....	26.53	31.28	35.45	40.49	51.16	79.16	131.77
1967 diff. B 50/25; E 25 i.e.....	26.09	30.77	34.84	39.80	50.19	77.30	128.28
1967 diff. B 75/25; E 25 i.e.....	26.45	31.21	35.44	40.44	50.95	78.54	130.04
1967 diff. B 100/25; E 25 i.e.....	26.45	31.32	35.59	40.50	51.14	78.85	130.48
1967 elect. #25 E.I.*.....	25.98		34.48				
1967 diff. B 50/25; E 25 i.e.*.....	25.54		33.87				
1967 diff. B 75/25; E 25 i.e.*.....	25.90		34.47				
1967 diff. B 100/25; E 25 i.e.*.....	25.99		34.62				
1971 elect. #25 E.I.....	33.58	39.26	44.80	51.95	66.19	102.70	174.65
1971 diff. B 50/25; E 25 i.e.....	33.46	39.14	44.71	51.82	65.88	101.93	172.70
1971 diff. B 75/25; E 25 i.e.....	33.73	39.48	45.15	52.20	66.45	102.85	174.02
1971 diff. B 100/25; E 25 i.e.....	34.00	39.80	45.61	52.72	67.02	103.79	175.34
1971 elect. #25 E.I.*.....	33.32		44.36				
1971 diff. B 50/25; E 25 i.e.*.....	33.20		44.27				
1971 diff. B 75/25; E 25 i.e.*.....	33.47		44.71				
1971 diff. B 100/25; E 25 i.e.*.....	33.74		45.17				
1973 elect. #25 E.I.....	37.09	43.36	49.68	57.73	73.91	114.56	196.66
1973 diff. B 50/25; E 25 i.e.....	37.24	43.59	50.07	58.14	74.19	114.73	195.99
1973 diff. B 75/25; E 25 i.e.....	37.63	43.95	50.55	58.66	74.80	115.73	197.40
1973 diff. B 100/25; E 25 i.e.....	37.92	44.42	51.20	59.35	75.62	117.06	199.30
1973 elect. #25 E.I.*.....	36.94		49.08				
1973 diff. B 50/25; E 25 i.e.*.....	37.09		49.47				
1973 diff. B 75/25; E 25 i.e.*.....	37.48		49.95				
1973 diff. B 100/25; E 25 i.e.*.....	37.77		50.60				
1975 elect. #25 E.I.....	55.36	64.62	74.32	87.03	110.83	170.87	294.21
1975 diff. B 50/25; E 25 i.e.....	55.33	64.63	74.43	87.10	110.72	170.31	292.33
1975 diff. B 75/25; E 25 i.e.....	56.10	65.57	75.71	88.46	112.34	172.95	296.07
1975 diff. B 100/25; E 25 i.e.....	56.82	66.45	76.91	89.74	113.86	175.43	299.59
1975 elect. #25 E.I.*.....	54.61		73.38				
1975 diff. B 50/25; E 25 i.e.*.....	54.58		73.49				
1975 diff. B 75/25; E 25 i.e.*.....	55.35		74.77				
1975 diff. B 100/25; E 25 i.e.*.....	56.07		75.97				
1977 elect. #25 E.I.....	64.63	75.43	86.80	101.62	129.41	199.46	343.43
1977 diff. B 50/25; E 25 i.e.....	64.62	75.47	86.96	101.73	129.32	198.87	341.32
1977 diff. B 75/25; E 25 i.e.....	65.29	76.29	88.08	102.93	130.74	201.19	344.62
1977 diff. B 100/25; E 25 i.e.....	66.15	77.34	89.51	104.45	132.55	204.14	348.80
1977 elect. #25 E.I.*.....	63.75		85.71				
1977 diff. B 50/25; E 25 i.e.*.....	63.74		85.87				
1977 diff. B 75/25; E 25 i.e.*.....	64.41		86.99				
1977 diff. B 100/25; E 25 i.e.*.....	65.27		88.42				

* No. 3.

CAN PRICES—Continued

Year	8Z Tall 211x304	No. 1 Pie 211x400	No. 303 303x406	No. 2 307x409	No. 2½ 401x411	No. 3 cyl. 404x700	No. 10 603x700
1979 elect. #25 E.I.	84.76	98.60	115.31	135.73	173.33	264.65	460.71
1979 diff. B 50/25; E 25 i.e.	84.92	98.84	115.77	136.15	173.57	264.56	459.20
1979 diff. B 75/25; E 25 i.e.	86.96	100.24	117.67	138.18	175.98	268.50	464.79
1979 diff. B 100/25; E 25 i.e.	87.25	101.69	119.65	140.29	178.49	272.59	470.60
1979 elect. #25 E.I.*	82.80	96.72	112.58	.....	.....	.....	.....
1979 diff. B 50/25; E 25 i.e.*	82.99	96.96	113.04	.....	.....	.....	.....
1979 diff. B 75/25; E 25 i.e.*	84.13	98.36	114.94	.....	.....	.....	.....
1979 diff. B 100/25; E 25 i.e.*	85.32	99.81	116.92	.....	.....	.....	.....
1981 elect. #25 E.I.	109.63	127.29	150.25	177.06	226.18	345.43	601.92
1981 diff. B 50/25; E 25 i.e.	109.80	127.57	150.82	177.57	226.42	345.16	599.71
1981 diff. B 75/25; E 25 i.e.	110.91	128.94	152.68	179.55	228.77	349.01	605.17
1981 diff. B 100/25; E 25 i.e.	112.82	131.27	155.86	182.94	232.80	355.58	614.50
1981 elect. #25 E.I.*	106.65	124.21	145.86	.....	.....	.....	.....
1981 diff. B 50/25; E 25 i.e.*	106.82	124.49	146.43	.....	.....	.....	.....
1981 diff. B 75/25; E 25 i.e.*	107.93	125.86	148.29	.....	.....	.....	.....
1981 diff. B 100/25; E 25 i.e.*	109.84	128.17	151.47	.....	.....	.....	.....
1983 elect. #25 E.I.	128.62	149.33	176.29	207.73	265.39	405.36	706.57
1983 diff. B 50/25; E 25 i.e.	128.19	148.91	175.93	207.24	264.33	402.82	700.61
1983 diff. B 75/25; E 25 i.e.	129.44	150.42	178.00	209.44	266.96	407.09	706.69
1983 diff. B 100/25; E 25 i.e.	130.88	152.18	180.40	212.00	270.00	412.05	713.73
1983 Elect. #25 E.I.*	125.12	145.71	171.15	.....	.....	.....	.....
1983 diff. B 50/25; E 25 i.e.*	124.69	145.29	170.79	.....	.....	.....	.....
1983 diff. B 75/25; E 25 i.e.*	125.94	146.80	172.86	.....	.....	.....	.....
1983 diff. B 100/25; E 25 i.e.*	127.38	148.56	175.26	.....	.....	.....	.....
1984 elect. #25 E.I.	137.63	159.78	188.62	222.28	283.96	433.73	756.02
1984 diff. B 50/25; E 25 i.e.	137.08	159.23	188.09	221.60	282.65	430.72	749.22
1984 diff. B 75/25; E 25 i.e.	138.33	160.74	190.16	223.80	285.28	434.99	755.30
1984 diff. B 100/25; E 25 i.e.	139.77	162.50	192.56	226.36	288.32	439.95	762.34
1984 elect. #25 E.I.*	133.88	153.85	183.12	.....	.....	.....	.....
1984 diff. B 50/25; E 25 i.e.*	133.33	153.35	182.59	.....	.....	.....	.....
1984 diff. B 75/25; E 25 i.e.*	134.58	156.86	184.66	.....	.....	.....	.....
1984 diff. B 100/25; E 25 i.e.*	136.02	158.62	187.06	.....	.....	.....	.....
1985 elect. #25 E.I.	144.23	167.45	197.68	232.95	297.60	454.55	792.31
1985 diff. B 50/25; E 25 i.e.	143.67	166.87	197.14	232.24	296.24	451.40	785.21
1985 diff. B 75/25; E 25 i.e.	144.96	168.46	199.30	234.54	298.97	455.87	791.55
1985 diff. B 100/25; E 25 i.e.	146.48	170.31	201.82	237.23	302.17	461.08	798.94
1985 elect. #25 E.I.*	140.30	163.39	191.92	.....	.....	.....	.....
1985 diff. B 50/25; E 25 i.e.*	139.74	162.81	191.38	.....	.....	.....	.....
1985 diff. B 75/25; E 25 i.e.*	141.03	164.40	193.54	.....	.....	.....	.....
1985 diff. B 100/25; E 25 i.e.*	142.55	166.25	196.06	.....	.....	.....	.....
1986 elect. #25 E.I.	147.84	171.64	202.62	238.77	305.04	465.91	812.12
1986 diff. B 50/25; E 25 i.e.	147.26	171.04	202.07	238.05	303.65	462.69	804.84
1986 diff. B 75/25; E 25 i.e.	148.58	172.67	204.28	240.40	306.44	467.27	811.34
1986 diff. B 100/25; E 25 i.e.	150.14	174.57	206.87	243.16	309.72	472.61	818.91
1986 elect. #25 E.I.*	143.81	167.47	196.72	.....	.....	.....	.....
1986 diff. B 50/25; E 25 i.e.*	143.23	166.88	196.16	.....	.....	.....	.....
1986 diff. B 75/25; E 25 i.e.*	144.56	168.51	198.38	.....	.....	.....	.....
1986 diff. B 100/25; E 25 i.e.*	146.11	170.41	200.96	.....	.....	.....	.....
1987 elect. #25 E.I.	154.34	179.19	211.54	249.28	318.46	486.41	847.85
1987 diff. B 50/25; E 25 i.e.	153.74	178.57	210.96	248.52	317.01	483.05	840.25
1987 diff. B 75/25; E 25 i.e.	155.12	180.27	213.27	250.98	319.92	487.83	847.04
1987 diff. B 100/25; E 25 i.e.	156.75	182.25	215.97	253.86	323.35	493.40	854.94
1987 elect. #25 E.I.*	150.14	174.94	205.38	.....	.....	.....	.....
1987 diff. B 50/25; E 25 i.e.*	149.53	174.22	204.79	.....	.....	.....	.....
1987 diff. B 75/25; E 25 i.e.*	150.92	175.92	207.11	.....	.....	.....	.....
1987 diff. B 100/25; E 25 i.e.*	152.54	177.91	209.80	.....	.....	.....	.....

Because of technical improvements, tin specifications for cans used for many high volume products have been reduced. Notice that, beginning in 1988, can prices reported here reflect the use of the lighter tin coating weights.

1988 elect. B 20 i.e.; E TFS	155.88	180.98	213.66	251.77	321.64	491.27	856.33
1988 diff. B 30/20; E TFS	155.28	180.36	213.07	251.01	320.18	487.88	848.65
1988 diff. B 60/20; E TFS	156.67	182.07	215.40	253.49	323.12	492.71	855.51
1988 diff. B 75/20; E TFS	158.32	184.07	218.13	256.40	326.58	498.33	863.49
1988 elect. *B 20 i.e.; E TFS	151.64	176.69	207.43	.....	.....	.....	.....
1988 diff. *B 30/20; E TFS	151.03	175.96	206.84	.....	.....	.....	.....
1988 diff. *B 60/20; E TFS	152.43	177.68	209.18	.....	.....	.....	.....
1988 diff. *B 75/20; E TFS	154.07	179.69	211.90	.....	.....	.....	.....

DESCRIPTION - Body & Ends of cans designated "elect. #25 E.I." are manufactured from tin plate plated with .25 lb. of tin per base box of metal and enameled inside. (Whenever .25 lb. is designated inside enamel is added). The nominal tin coating weight for each surface (inside/outside) is .125 lb. and may be expressed 0.125/0.125. The inside and outside of differential cans are coated with different amounts of tin. For an explanation of Tin Coating Weights see page

preceding "CAN PRICES" in this Almanac. Base box means a unit of area of tin plate covering 31,360 square inches.

E.I. means Body and Ends Enameled inside; B means body; E means ends; i.e. means inside enamel; TFS means Tin Free Steel. TFS is coated inside and outside.

The asterisk indicates the use of 60 DR (Double Reduced, lighter than conventional) steel in the body.

METAL-CAN SHIPMENTS BY PRODUCT

Source: Can Manufacturers Institute
Millions of Cans

	1981	1982	1983	1984	1985	1986	1987	1988
FOOD								
Fruits & Juices	4,163	3,788	3,651	3,389	3,046	2,783	3,009	3,225
Vegetables & Juices	9,331	9,087	8,303	8,702	8,339	8,544	8,556	8,266
Dairy Products	854	889	927	974	1,246	1,203	1,188	1,268
Meat, Incl. Poultry	1,327	1,411	1,492	1,508	1,492	1,447	1,572	1,566
Seafood	1,477	1,341	1,527	1,607	1,881	1,914	1,958	1,697
Shortening	218	246	247	186	109	55	43	8
Baby Food	834	895	902	915	936	956	995	1,043
Other Food (a)	5,607	5,724	5,689	6,168	6,111	5,985	5,952	5,937
Total Foods	23,811	23,381	22,738	23,449	23,160	22,887	23,273	23,010
BEVERAGES								
Coffee	674	653	632	644	615	553	565	571
Soft Drinks	25,425	26,205	28,321	31,290	34,563	36,844	40,293	44,930
Beer	30,901	31,729	33,135	34,354	35,614	36,058	36,480	36,250
Total Beverages	57,000	58,587	62,088	66,288	70,792	73,455	77,338	81,751
PET FOOD	3,663	3,593	3,571	4,020	4,069	4,488	4,543	4,490
NON-FOOD								
Aerosol	2,059	1,970	2,144	2,223	2,277	2,530	2,508	2,684
Motor Oil	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Paint & Varnish	813	795	817	840	830	816	842	780
Automotive Products	601	257	229	199	168	133	128	80
Other NON Food	863	738	807	762	603	604	582	552
Total Non-Food	4,336	3,760	3,997	4,024	3,878	4,083	4,060	4,096
Total Shipments	88,810	89,321	92,394	97,781	101,899	104,913	109,214	113,347
Total Steel	40,116	36,393	34,316	34,654	34,559	34,302	33,342	33,190
Total Aluminum	48,694	52,928	58,078	63,127	67,340	70,611	75,872	80,157
Total for Sale	59,433	59,375	61,907	66,405	69,810	75,509	81,204	86,944
Total for Own Use	29,377	29,946	30,487	31,376	32,089	29,404	28,010	26,402
Wgt of Aluminum cans (b) ..	2,782	2,810	3,168	3,562	3,561	3,730	4,265	

(a) Including soup. (b) Millions of pounds. n.a. - Not available.

GLASS CONTAINER SHIPMENTS BY TYPE OF CONTAINER*

Source: Bureau of Census, U.S. Department of Commerce
(Thousands of gross)

Type of Container	1980 ³	1981 ³	1982 ³	1983 ³	1984	1985	1986	1987	†1988
All Types Total	326,132	322,845	308,846	293,103	289,950	272,821	283,057	281,636	276,024
Direct exports*	2,233	2,165	1,333	1,416	1,678	941	815	642	n.a.
Domestic	323,899	320,680	307,513	291,687	288,272	271,880	282,242	280,994	n.a.
Narrow Neck, Tot.	257,447	253,060	240,559	228,762	221,055	208,561	220,262	218,963	210,139
Food	28,075	28,728	27,658	28,270	26,170	23,770	25,266	27,252	25,137
Medicinal/health	12,956	12,536	12,393	9,665	10,140	8,710	*12,027	*8,549	*6,643
Chem./Household/Indus.	2,071	1,718	1,456	976	1,379	942	*1,490	*1,371	*1,013
Toiletries/cosm.	9,245	8,489	7,906	6,506	6,566	5,302	*6,816	*5,618	*3,129
Bev., returnable	4,571	4,138	3,729	3,383	2,100	1,553	841	(²)	(²)
Bev., nonreturn	53,277	56,110	57,291	59,234	59,475	58,532	59,044	62,434	61,325
Beer, returnable	1,869	1,570	1,899	2,475	3,473	1,870	2,902	2,354	2,410
Beer, nonreturn	120,809	115,768	105,962	94,625	87,323	81,907	84,020	83,003	83,889
Liquor	15,790	15,365	13,857	14,712	14,015	11,939	10,965	11,849	10,378
Wine	8,784	8,638	8,408	8,916	10,414	14,036	16,891	16,533	16,215
Wide Mouth, Total.	66,452	67,620	68,287	64,341	68,895	64,260	n.a.	n.a.	n.a.
Food ²	61,212	62,404	63,372	60,108	64,302	59,935	62,795	62,673	65,885
Medicinal/health	3,084	3,274	3,097	2,995	3,150	2,715	(⁴)	(⁴)	(⁴)
Chem./Household/Indus.	1,191	1,122	1,159	812	988	1,015	(⁴)	(⁴)	(⁴)
Toiletries/cosm.	965	820	659	426	455	595	(⁴)	(⁴)	(⁴)
Dairy products	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)

*Thru 1981, shipments by type represent Domestic Container Shipments only. Beginning 1982 "Direct exports" are included in breakdown of domestic shipments by type. (²)Data for dairy products is combined with Food. (³)Revised. (⁴)Data for wide mouth included with narrow neck. (⁵)Included with Bev. nonreturn. n.a. - Not available. † Preliminary.

THE ALMANAC

OF THE CANNING, FREEZING, PRESERVING INDUSTRIES

Section VII

RAW PRODUCT STATISTICS

Source: Crop Reporting Board, Statistical Reporting Service, U.S.D.A.

In order to stay within the fiscal funding level the U.S. Department of Agriculture's Statistical Reporting Service reduced the number of fresh market and processing vegetable crop estimates beginning with the 1982 crop year. Fresh market estimates for artichokes, asparagus, snap beans, brussels sprouts, cabbage, cantaloupes, cucumbers, eggplant, escarole/endive, garlic, green peppers, watermelons and spinach were discontinued. Estimates for asparagus were resumed with the 1984 crop year.

Processing vegetable crop estimates were discontinued for lima beans, beets, cabbage for kraut, cucumbers for pickles, spinach and asparagus. Estimates for asparagus and cucumbers were resumed with the 1984 crop year.

INDEX TO CONTENTS

PRINCIPAL VEGETABLE CROPS FOR PROCESSING	
ACREAGE, YIELD, PRODUCTION, VALUE PER TON, TOTAL VALUE	511
Beans, Snap	511
Corn, Sweet	515
Cucumbers	517
Peas	519
Tomatoes	522
Summary, Commodity	525
Summary, State	526, 527, 528
VEGETABLE CROPS FOR PROCESSING & FRESH MARKET	
Asparagus	529
Broccoli	530
Carrots	531
Cauliflower	533
Mushrooms	535
Sweet Potatoes	534
FRUIT CROPS, UTILIZATION, PRICE, VALUE	
Apples	536
Apricots	542
Cherries, Sweet	538
Cherries, Tart	539
Cranberries	542
Grapefruit	541
Olives	543
Oranges	540
Peaches	543
Pears	544

PRINCIPAL VEGETABLE CROPS FOR PROCESSING
SNAP BEANS—HARVESTED ACREAGE—1,000 ACRES (Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York	45.6	46.4	38.9	35.6	33.8	32.8	33.4	25.8	28.6	28.0
New Jersey	6.8	6.4	7.4	9.3	6.2	8.0	8.3	(a)	(a)	(a)
Pennsylvania	4.7	5.9	5.5	6.2	4.5	4.9	4.5	4.5	6.6	6.4
Delaware	4.9	6.1	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Maryland	8.6	4.9	3.9	2.6	(a)	(a)	(a)	(a)	(a)	(a)
EAST†	70.5	69.7	55.7	53.7	44.5	45.7	46.2	30.3	35.2	34.4
Virginia	4.0	2.9	1.8	(a)	(a)	(a)	(a)	....	(a)	(a)
North Carolina	4.0	2.8	2.2	1.5	(a)	(a)	1.7	(a)	(a)	(a)
Florida	13.5	7.3	1.5	2.0	.6	2.5	1.2	(a)	(a)	(a)
SOUTHEAST†	21.5	13.0	5.5	3.5	.6	2.5	2.9	(a)	(a)	(a)
Illinois	9.5	6.6	(a)	(a)	(a)	(a)	(a)	(a)	(a)	9.5
Indiana	2.7	2.4	1.6	1.1	1.9	2.8	3.2	1.6	5.8	6.2
Michigan	17.3	13.7	14.3	14.2	14.8	17.5	18.7	17.6	19.5	19.5
Minnesota	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	5.2	5.4
Wisconsin	79.3	78.8	70.2	64.5	72.4	77.6	55.8	77.8	88.7	90.0
MID-WEST†	108.8	101.5	86.1	79.8	89.1	97.9	107.7	97.0	119.2	130.6
Arkansas	(a)	(a)	4.1	3.6	2.5	3.1	3.3	2.6	3.0	3.6
Tennessee	9.9	12.1	7.6	6.9	4.9	5.3	5.0	5.3	5.4	6.0
Oklahoma	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Texas	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
SO. CENTRAL†	9.9	12.1	11.7	10.5	8.2	8.4	8.3	7.9	8.4	9.6
Colorado	1.5	.8	1.0	.5	....	....	....	....	....	....
Washington	2.3	2.4	1.6	2.1	1.4	1.1	1.5	1.2	1.1	.8
Oregon	38.4	31.1	27.4	25.7	22.4	23.9	23.2	22.3	20.3	21.7
California	7.3	4.5	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
WEST†	49.5	38.8	30.0	28.3	23.8	25.0	24.7	23.5	21.4	22.5
OTHER STS†	25.1	20.6	29.3	28.6	30.5	37.1	32.4	31.9	37.0	26.2
For Freezing	64.0	56.4	56.3	60.0	57.2	62.3	62.1	55.9	65.5	62.3
For Canning	221.5	199.3	162.0	144.5	139.5	154.3	160.1	134.6	155.7	161.1
PROCESSING	285.4	255.7	218.3	204.4	196.7	216.6	222.2	190.6	221.2	223.4
FRESH MKT.	85.5	95.7	88.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
TOT. U.S.	370.9	351.4	306.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

n.a. - Not available. (a) Included in "Other States".

† Area totals do not include quantities in "OTHER STS."

Processors of Raw Products
Detailed in this Section
are listed in
The 1988-89 DIRECTORY
See Details at Page 5 of this Almanac

SNAP BEANS — YIELD PER ACRE — TONS (Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York	2.3	2.4	2.5	2.8	2.6	2.5	2.7	2.3	2.5	1.9
New Jersey	2.1	2.6	2.8	2.7	1.8	2.8	3.1	n.a.	n.a.	n.a.
Pennsylvania	2.1	1.6	2.3	2.2	1.8	2.9	3.4	2.0	2.0	1.9
Delaware	2.5	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Maryland	1.8	1.8	2.6	2.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Virginia	2.0	1.5	2.3	n.a.	n.a.	n.a.	n.a.	....	n.a.	n.a.
North Carolina	2.1	1.6	2.0	2.8	n.a.	n.a.	1.7	n.a.	n.a.	n.a.
Florida	2.4	1.9	2.0	1.5	1.5	1.5	1.5	n.a.	n.a.	n.a.
Illinois	3.0	3.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3.3
Indiana	2.4	2.3	2.6	3.2	1.3	3.1	2.6	2.7	2.7	2.8
Michigan	2.1	2.8	2.5	2.6	2.8	2.8	2.6	2.4	2.2	1.8
Minnesota	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3.4	2.5
Wisconsin	2.7	2.7	3.1	3.0	2.9	3.0	2.9	3.2	3.2	2.5
Arkansas	n.a.	n.a.	3.1	2.8	2.2	1.4	2.2	1.5	2.2	1.8
Tennessee	1.6	1.1	2.5	2.6	1.8	2.1	2.3	1.4	2.0	1.4
Oklahoma	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Texas	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Colorado	3.5	3.0	4.0	3.6	....	....	....	....	....	....
Washington	3.9	3.8	3.0	3.5	3.9	3.4	3.1	4.1	4.5	4.6
Oregon	4.5	5.2	5.3	5.2	5.5	5.4	5.4	6.2	5.8	5.8
California	1.9	2.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
For Freezing	2.6	2.9	3.3	3.2	3.1	3.2	3.4	3.4	3.1	3.0
For Canning	2.7	2.7	3.0	3.1	2.9	3.0	3.1	3.1	3.0	2.6
US PROC AV	2.7	2.8	3.1	3.2	3.0	3.1	3.2	3.2	3.1	2.7

SNAP BEANS — PRODUCTION — 1,000 TONS (Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York	106.3	113.2	96.1	100.4	88.2	82.7	91.2	60.4	70.6	52.9
New Jersey	14.4	16.9	20.5	24.7	11.3	22.5	26.0	(a)	(a)	(a)
Pennsylvania	9.9	9.2	12.4	13.4	7.9	14.1	15.4	9.0	13.2	12.0
Delaware	12.2	12.4	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Maryland	15.7	8.6	10.1	6.3	(a)	(a)	(a)	(a)	(a)	(a)
EAST†	158.4	160.3	139.0	144.8	107.4	119.3	132.6	69.3	83.8	64.9
Virginia	7.8	4.4	4.2	(a)	(a)	(a)	(a)	....	(a)	(a)
North Carolina	8.3	4.5	4.4	4.1	(a)	(a)	2.8	(a)	(a)	(a)
Florida	32.9	14.1	3.0	3.0	.9	3.8	1.8	(a)	(a)	(a)
SOUTHEAST†	49.1	23.0	11.6	7.1	.9	3.8	4.6	(a)	(a)	(a)
Illinois	28.4	20.1	(a)	(a)	(a)	(a)	(a)	(a)	(a)	31.1
Indiana	6.5	5.5	4.2	3.5	2.4	8.6	8.2	4.3	15.9	17.7
Michigan	36.0	38.4	36.2	36.6	41.4	49.0	48.6	42.2	42.9	35.1
Minnesota	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	17.4	13.4
Wisconsin	212.5	211.2	214.1	190.3	210.7	235.1	248.8	247.4	279.4	225.0
MID-WEST†	283.4	275.1	254.5	230.5	254.5	292.8	305.6	293.9	355.6	322.2
Arkansas	(a)	(a)	12.6	10.0	7.3	4.4	7.2	3.9	6.6	6.4
Tennessee	15.9	12.7	19.3	17.9	8.9	11.3	11.3	7.6	10.8	8.4
Oklahoma	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Texas	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
SO. CENTRAL†	15.9	12.7	31.9	27.9	16.3	15.7	18.4	11.5	17.4	14.8
Colorado	5.3	2.3	4.0	1.9	....	....	....	....	....	....
Washington	9.1	9.1	4.9	7.4	5.5	3.7	4.7	4.9	5.0	3.7
Oregon	172.4	160.5	144.4	133.4	123.7	128.3	124.8	138.7	117.9	125.2
California	13.9	12.1	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
WEST†	200.7	183.9	153.3	142.7	129.2	132.0	129.5	143.6	122.9	128.9
OTHER STS.	61.5	49.1	81.9	90.8	79.2	102.6	111.8	91.1	99.2	70.5
For Freezing	167.4	160.6	184.5	193.8	178.5	201.6	213.3	189.3	205.0	184.9
For Canning	601.7	543.6	487.7	450.1	409.0	464.5	489.2	420.1	474.0	416.4
PROCESSING ...	769.1	704.2	672.2	643.9	587.4	666.1	702.5	609.4	679.0	601.3
FRESH MKT	146.4	152.2	146.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL U.S.	915.5	856.4	818.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

† Area totals do not include quantities in "OTHER STATES". (a) Included in "OTHER STATES".
n.a. Not available.

PRINCIPAL VEGETABLE CROPS FOR PROCESSING — Cont.

SNAP BEANS — VALUE PER TON — DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York	161.00	169.00	185.00	178.00	178.00	181.00	184.00	170.00	165.00	161.00
New Jersey	172.00	191.00	205.00	202.00	200.00	202.00	206.00	n.a.	n.a.	n.a.
Pennsylvania	167.00	175.00	191.00	201.00	198.00	200.00	207.00	186.00	195.00	213.00
Delaware	169.00	159.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Maryland	169.00	169.00	191.00	217.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Virginia	167.00	179.00	183.00	n.a.	n.a.	n.a.	n.a.	....	n.a.	n.a.
North Carolina	161.00	179.00	187.00	190.00	n.a.	n.a.	234.00	n.a.	n.a.	n.a.
Florida	148.00	198.00	230.00	200.00	200.00	300.00	300.00	n.a.	n.a.	n.a.
Illinois	139.00	152.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	179.00
Indiana	182.00	144.00	140.00	129.00	177.00	190.00	175.00	169.00	190.00	203.00
Michigan	162.00	156.00	160.00	145.00	144.00	136.00	158.00	143.00	149.00	149.00
Minnesota	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	146.00	138.00
Wisconsin	137.00	134.00	146.00	137.00	140.00	152.00	152.00	143.00	143.00	153.00
Arkansas	n.a.	n.a.	164.00	165.00	186.00	176.00	174.00	184.00	164.00	186.00
Tennessee	183.00	211.00	211.00	204.00	200.00	204.00	203.00	199.00	195.00	210.00
Oklahoma	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Texas	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Colorado	126.00	142.00	152.00	142.00	....	....	....	....	....	....
Washington	159.00	163.00	171.00	166.00	147.00	223.00	167.00	202.00	198.00	193.00
Oregon	153.00	155.00	158.00	169.00	159.00	176.00	174.00	174.00	178.00	174.00
California	206.00	237.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
For Freezing	163.00	169.00	176.00	184.00	178.00	194.00	190.00	182.00	181.00	183.00
For Canning	150.00	152.00	162.00	158.00	153.00	161.00	160.00	150.00	151.00	159.00
US PROC AV	153.00	156.00	166.00	166.00	160.00	171.00	169.00	160.00	160.00	166.00

n.a. - Not available.

SNAP BEANS — TOTAL VALUE — 1,000 DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York	17,106	19,134	17,775	17,869	15,703	14,961	16,777	10,263	11,656	8,520
New Jersey	2,480	3,228	4,203	4,997	2,256	4,541	5,352	(a)	(a)	(a)
Pennsylvania	1,657	1,601	2,365	2,691	1,568	2,822	3,196	1,667	2,574	2,550
Delaware	2,062	1,972	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Maryland	2,645	1,457	1,921	1,371	(a)	(a)	(a)	(a)	(a)	(a)
EAST†	25,950	27,392	26,264	26,928	19,527	22,324	25,325	11,930	14,230	11,070
Virginia	1,303	789	770	(a)	(a)	(a)	(a)	....	(a)	(a)
North Carolina	1,340	809	823	785	(a)	(a)	658	(a)	(a)	(a)
Florida	4,875	2,790	690	600	180	1,125	540	(a)	(a)	(a)
SOUTHEAST†	7,518	4,388	2,283	1,385	180	1,125	1,198	(a)	(a)	(a)
Illinois	3,949	3,049	(a)	(a)	(a)	(a)	(a)	(a)	(a)	5,562
Indiana	1,188	798	589	455	421	1,638	1,428	725	3,019	3,587
Michigan	5,829	5,984	5,789	5,313	5,967	6,664	7,682	6,040	6,392	5,230
Minnesota	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	2,543	1,848
Wisconsin	29,115	28,298	31,260	26,068	29,495	35,740	37,821	35,378	39,956	34,425
MID-WEST†	40,081	38,129	37,638	31,836	35,883	44,042	46,931	42,143	51,910	50,652
Arkansas	(a)	(a)	2,071	1,657	1,363	769	1,251	718	1,087	1,190
Tennessee	2,917	2,682	4,072	3,645	1,784	2,313	2,284	1,508	2,106	1,764
Oklahoma	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Texas	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
S. CENTRAL†	2,917	2,682	6,143	5,302	3,147	3,082	3,535	2,226	3,193	2,954
Colorado	668	331	608	273	....	....	....	....	....	....
Washington	1,441	1,478	829	1,227	811	823	777	990	982	706
Oregon	26,380	24,874	22,815	22,541	19,660	22,588	21,719	24,136	20,998	21,787
California	2,872	2,858	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
WEST†	31,861	29,541	24,252	24,041	20,471	23,411	22,496	25,126	21,975	22,498
OTHER STS.	10,042	7,902	14,814	17,118	15,044	19,951	19,314	15,837	17,128	12,841
For Freezing	27,360	27,214	32,559	35,700	31,699	39,164	40,421	34,359	37,104	33,826
For Canning	90,509	82,820	78,835	70,910	62,553	74,771	78,378	62,903	71,332	66,184
T. US PROC	117,869	110,034	111,394	106,610	94,252	113,935	118,799	97,262	108,436	100,010

† Area totals do not include values in "OTHER STATES". (a) Included in "OTHER STATES".

PRINCIPAL VEGETABLE CROPS FOR PROCESSING—Cont.

SWEET CORN—HARVESTED ACREAGE—1,000 ACRES

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York.....	20.5	17.0	21.1	24.6	25.5	28.3	29.7	27.1	27.9	25.0
Pennsylvania.....	3.9	4.0	4.1	4.5	3.7	3.6	4.1	3.5	3.0	2.8
Delaware.....	3.1	2.4	3.0	3.9	4.0	5.0	4.6	4.9	5.4	5.3
Maryland.....	10.3	8.6	8.1	8.6	8.9	8.3	9.0	7.6	6.3	6.8
EAST†.....	37.8	32.0	36.3	41.6	42.1	45.2	47.4	43.1	42.6	39.9
Illinois.....	44.0	37.8	38.3	38.4	34.5	36.5	36.2	31.7	27.6	30.6
Wisconsin.....	121.4	106.1	113.4	122.2	117.9	129.0	131.4	122.2	140.0	130.3
Minnesota.....	98.3	101.2	105.2	119.3	108.4	115.0	118.3	123.5	112.2	125.7
Iowa.....	5.0	3.1	3.9	(a)	(a)	(a)	(a)	(a)	(a)	(a)
MIDWEST†.....	268.7	248.2	260.8	279.9	260.8	280.5	285.9	277.4	279.8	286.6
Idaho.....	23.8	17.8	19.3	21.5	14.1	17.4	17.3	16.5	17.2	18.2
Washington.....	40.5	36.7	41.8	51.7	38.3	32.9	38.9	35.3	44.6	49.2
Oregon.....	37.8	33.7	39.9	45.5	38.8	42.0	38.6	34.9	38.9	37.1
WEST†.....	102.1	88.2	101.0	118.7	91.2	92.3	94.8	86.7	101.3	104.5
OTHER STS.....	9.0	7.0	2.9	6.7	5.7	9.2	7.2	6.2	7.2	7.5
For Freezing...	119.7	112.5	126.9	156.6	133.4	143.4	162.3	158.5	165.9	162.3
For Canning...	297.9	262.9	274.1	290.3	266.4	283.9	273.0	254.9	265.1	276.2
PROCESSING...	417.6	375.4	401.0	446.9	399.8	427.2	435.3	413.4	430.9	438.5
FRESH MKT...	179.8	180.5	183.7	186.1	190.8	193.0	190.6	184.6	189.6	176.8
TOT. U.S.....	597.4	555.9	584.7	633.0	590.6	620.2	625.9	598.0	620.5	615.3

† Area totals do not include quantities in "OTHER STATES".

(a) Included in "OTHER STATES".

SWEET CORN—YIELD PER ACRE—TONS IN HUSK

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York.....	5.33	5.05	4.66	5.27	5.21	5.58	4.09	5.12	6.92	3.80
Pennsylvania....	2.91	3.54	3.21	3.61	2.48	4.66	3.97	3.29	3.51	3.71
Delaware.....	5.17	4.90	3.14	5.28	4.58	5.71	5.73	4.77	4.72	4.98
Maryland.....	4.61	4.20	4.17	4.61	3.59	5.86	6.04	5.46	5.16	5.04
Illinois.....	5.72	4.26	5.51	4.88	4.19	5.32	5.71	4.79	5.41	3.78
Wisconsin.....	4.73	4.84	5.24	4.60	4.82	4.95	5.09	5.37	5.50	4.40
Minnesota.....	5.72	5.42	5.45	5.73	4.60	5.82	5.77	5.95	6.50	4.38
Iowa.....	5.40	5.83	5.67	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Idaho.....	7.95	8.19	7.75	8.71	8.32	8.17	8.53	9.01	9.35	9.00
Washington.....	7.77	8.31	7.96	9.08	9.12	7.47	8.40	8.37	9.02	8.75
Oregon.....	8.53	8.68	8.11	9.01	8.55	8.70	9.19	9.24	8.84	9.18
Other States....	4.24	3.67	5.82	5.16	4.37	4.88	4.77	5.63	6.07	4.49
For Freezing..	6.95	6.84	6.56	7.20	6.75	6.76	6.84	6.84	7.41	6.47
For Canning...	5.48	5.28	5.64	5.56	4.98	5.58	5.60	5.79	6.18	4.79
U.S. PROC. AV ..	5.90	5.75	5.93	6.13	5.57	5.97	6.06	6.19	6.65	5.41

(a) Included in "Other States".

SWEET CORN—PRODUCTION—1,000 TONS IN HUSK

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York	109.3	85.9	98.3	129.6	132.9	157.9	121.5	138.8	193.1	95.0
Pennsylvania	11.4	14.2	13.2	16.3	9.2	16.8	16.3	11.5	10.5	10.4
Delaware	16.0	11.8	9.4	20.6	18.3	28.6	26.4	23.4	25.5	26.4
Maryland	47.5	36.2	33.8	39.7	32.0	48.6	54.4	41.5	32.5	34.3
EAST†	184.1	147.9	154.7	206.1	192.4	251.9	218.5	215.1	261.6	166.1
Illinois	251.7	161.0	211.0	187.4	144.6	194.2	206.7	151.8	149.3	115.7
Wisconsin	574.2	513.5	594.2	562.1	568.3	638.6	668.8	656.2	770.0	573.3
Minnesota	562.3	548.5	573.3	683.6	498.6	669.3	682.6	734.8	729.3	550.6
Iowa	27.0	18.1	22.1	(a)	(a)	(a)	(a)	(a)	(a)	(a)
MID-WEST†	1,415.2	1,241.1	1,400.7	1,433.1	1,211.5	1,502.0	1,558.1	1,542.9	1,648.6	1,239.6
Idaho	189.2	145.8	149.6	187.3	117.3	142.2	147.6	148.7	166.4	163.8
Washington	314.7	305.0	332.7	469.4	349.3	245.8	326.8	295.5	402.3	430.5
Oregon	322.4	292.5	323.6	410.0	331.7	365.4	354.7	322.5	343.9	340.6
WEST†	826.3	743.3	805.9	1,066.7	798.4	753.3	829.1	766.6	912.6	934.9
OTHER STS†	38.3	25.7	16.9	34.6	24.9	44.9	34.4	34.8	43.8	33.7
For Freezing ..	832.4	769.4	832.0	1,126.9	900.7	969.7	1,110.7	1,083.5	1,228.3	1,050.8
For Canning ...	1,631.5	1,388.6	1,546.2	1,613.5	1,326.3	1,582.5	1,529.3	1,475.9	1,638.3	1,323.3
PROCESSING ...	2,463.9	2,158.0	2,378.2	2,740.5	2,227.1	2,552.2	2,640.0	2,559.4	2,866.6	2,374.2
FRESH MKT	701.7	714.1	714.4	721.8	743.4	779.5	786.1	750.9	770.0	717.8
TOT. U.S.	3,165.6	2,872.1	3,092.6	3,462.2	2,970.5	3,331.6	3,426.1	3,310.3	3,636.6	3,092.0

SWEET CORN—VALUE PER TON—DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York	47.00	48.90	62.10	64.80	66.10	62.40	63.70	60.00	57.00	55.70
Pennsylvania	43.30	49.10	66.10	58.00	52.20	64.40	52.10	50.30	50.00	52.40
Delaware	67.30	85.40	79.50	58.00	65.20	79.80	71.20	47.90	54.60	69.00
Maryland	57.00	67.60	76.50	57.20	65.90	80.00	65.80	48.20	58.00	62.80
Illinois	51.90	63.50	76.60	68.10	66.30	69.90	67.10	58.60	62.90	70.00
Wisconsin	40.50	44.70	60.10	50.50	56.40	57.30	60.30	57.70	57.50	59.10
Minnesota	46.70	50.00	57.30	56.30	52.90	61.40	59.50	53.80	56.10	56.10
Iowa	48.50	50.60	47.80	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Idaho	52.90	54.70	64.50	64.00	61.70	62.10	62.50	58.20	53.40	53.90
Washington	66.50	60.30	64.60	70.60	60.70	68.00	68.70	68.60	67.10	64.80
Oregon	62.70	62.30	67.00	70.50	68.50	71.10	69.70	66.60	64.20	71.30
Other States	51.90	53.60	66.90	49.10	60.00	58.90	59.60	60.40	60.10	58.80
For Freezing ..	59.50	57.10	62.90	67.40	62.10	66.60	66.70	62.60	62.80	63.30
For Canning ...	47.10	51.80	63.20	57.10	58.30	61.90	61.00	56.20	56.70	59.80
US PROC AV	51.30	53.70	63.10	61.40	59.80	63.70	63.40	58.90	59.30	61.40

SWEET CORN—TOTAL VALUE—1,000 DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York	5,135	4,198	6,106	8,401	8,782	9,854	7,738	8,325	11,005	5,292
Pennsylvania	491	695	870	943	479	1,081	848	579	527	544
Delaware	1,079	1,005	749	1,194	1,194	2,278	1,877	1,119	1,392	1,821
Maryland	2,706	2,444	2,584	2,268	2,106	3,891	3,577	2,000	1,886	2,152
EAST†	9,411	8,342	10,309	12,806	12,561	17,104	14,040	12,023	14,810	9,809
Illinois	13,062	10,225	16,165	12,761	9,584	13,573	13,870	8,898	9,392	8,097
Wisconsin	23,256	22,954	35,713	28,387	32,061	36,589	40,330	37,863	44,275	33,883
Minnesota	26,258	27,425	32,852	38,486	26,378	41,095	40,614	39,534	40,914	30,887
Iowa	1,310	914	1,057	(a)	(a)	(a)	(a)	(a)	(a)	(a)
MID-WEST†	63,886	51,518	85,787	79,634	68,013	91,257	94,814	86,295	94,581	72,867
Idaho	10,009	7,974	9,648	11,985	7,238	8,828	9,223	8,653	8,887	8,829
Washington	20,927	18,390	21,494	33,142	21,203	16,712	22,448	20,269	26,994	27,908
Oregon	20,216	18,224	21,681	28,902	22,724	25,980	24,725	21,477	22,077	24,283
WEST†	51,152	44,588	52,823	74,029	51,165	51,520	56,396	50,399	57,958	61,020
OTHER STS†	1,990	1,378	1,129	1,696	1,494	2,649	2,047	2,104	2,635	1,979
For Freezing ..	49,518	43,941	52,355	75,961	55,939	64,552	74,028	67,823	77,132	66,488
For Canning ...	76,921	71,885	97,693	92,204	77,294	97,978	93,269	82,998	92,852	79,187
T. US PROC	126,439	115,826	150,048	168,165	133,233	162,530	167,297	150,821	169,984	145,675

†Area totals do not include values in "OTHER STATES". (a) Included in "OTHER STATES".

PRINCIPAL VEGETABLE CROPS FOR PROCESSING—Cont.

CUCUMBERS FOR PICKLES—HARVESTED ACREAGE—1,000 ACRES

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Indiana	.9	.9	.7	n.a.	n.a.	.8	1.1	1.2	1.1	1.2
Michigan	25.5	18.9	15.5	n.a.	n.a.	21.3	24.0	24.0	24.0	23.0
New Jersey	1.4	1.4	1.1	n.a.	n.a.	1.1	.7	.8	.6	.6
Ohio	6.4	6.1	5.2	n.a.	n.a.	4.8	4.8	4.5	4.5	3.9
Wisconsin	10.3	9.5	7.1	n.a.	n.a.	7.8	6.7	7.2	5.7	6.8
NORTHERN† ...	44.5	36.8	29.6	n.a.	n.a.	35.8	37.3	37.7	35.9	35.5
Alabama	(a)	(a)	(a)	n.a.	n.a.	(a)	(a)	(a)	(a)	(a)
Florida	6.3	7.2	5.0	n.a.	n.a.	4.7	4.8	4.4	3.9	6.0
Delaware	1.8	1.6	1.7	n.a.	n.a.	1.5	1.5	(a)	(a)	(a)
Maryland	2.9	3.0	2.5	n.a.	n.a.	3.5	3.9	3.3	2.2	(a)
Mississippi	(a)	(a)	(a)	n.a.	n.a.	(a)	(a)	(a)	(a)	(a)
N. Carolina	28.5	25.8	25.5	n.a.	n.a.	26.1	29.1	25.3	24.7	25.8
S. Carolina	10.9	8.2	10.4	n.a.	n.a.	9.3	13.6	13.3	13.2	11.2
Texas	8.3	9.4	4.8	n.a.	n.a.	6.8	6.1	8.2	9.8	14.1
Virginia	2.3	3.2	1.8	n.a.	n.a.	(a)	(a)	.....	(a)	(a)
SOUTHERN† ...	61.0	58.4	51.7	n.a.	n.a.	51.9	59.0	54.5	53.8	57.1
California	4.4	3.6	3.4	n.a.	n.a.	3.3	4.1	4.0	4.1	3.8
Colorado	2.2	2.6	1.8	n.a.	n.a.	2.2	2.6	1.5	1.3	1.5
Oregon	1.5	1.6	1.4	n.a.	n.a.	2.0	2.1	1.9	1.9	2.2
Washington	1.3	1.4	1.5	n.a.	n.a.	1.5	1.7	1.7	1.7	1.4
WESTERN†	9.4	9.2	8.1	n.a.	n.a.	9.0	10.5	9.1	9.0	8.9
OTHER STATES	16.7	12.0	8.2	n.a.	n.a.	6.9	8.4	9.2	11.0	17.3
PROCESSING ...	131.7	116.4	97.5	n.a.	n.a.	103.6	115.2	110.5	109.6	118.8
FRESH MKT	50.7	54.2	51.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL U.S.	182.4	170.6	148.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

(a) Included in "OTHER STATES".
Not available.

† Area totals do not include quantities in "OTHER STATES".

n.a.-

CUCUMBERS FOR PICKLES—YIELD PER ACRE—TONS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Indiana	7.03	7.29	10.26	n.a.	n.a.	11.29	11.71	9.88	11.13	9.50
Michigan	4.62	5.56	6.50	n.a.	n.a.	5.50	5.60	5.80	6.70	5.50
New Jersey	6.86	8.00	9.51	n.a.	n.a.	9.45	11.01	8.47	8.75	6.02
Ohio	12.53	10.25	12.24	n.a.	n.a.	11.73	12.60	12.72	10.40	9.30
Wisconsin	6.21	5.65	6.74	n.a.	n.a.	7.87	9.25	7.50	8.03	6.90
Alabama	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Florida	4.50	4.00	4.00	n.a.	n.a.	4.50	5.00	5.50	6.00	6.00
Delaware	4.27	4.50	4.41	n.a.	n.a.	4.77	4.35	n.a.	n.a.	n.a.
Maryland	9.32	8.75	11.37	n.a.	n.a.	7.51	7.27	6.39	7.40	n.a.
Mississippi	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
N. Carolina	2.81	3.43	3.20	n.a.	n.a.	3.30	3.41	3.20	3.42	3.87
S. Carolina	2.46	2.75	2.65	n.a.	n.a.	3.80	3.57	3.44	2.95	3.55
Texas	4.42	4.36	4.96	n.a.	n.a.	6.00	6.15	5.20	4.80	3.80
Virginia	4.89	3.25	3.37	n.a.	n.a.	n.a.	n.a.	.....	n.a.	n.a.
California	15.64	14.60	18.59	n.a.	n.a.	17.10	17.92	16.17	15.00	18.16
Colorado	8.34	8.85	9.00	n.a.	n.a.	8.58	7.33	9.70	9.62	10.85
Oregon	11.55	11.77	15.40	n.a.	n.a.	12.50	12.15	11.90	12.08	12.10
Washington	10.62	9.84	10.15	n.a.	n.a.	11.18	9.88	9.00	9.98	10.22
U.S. PROC. AV ..	5.08	5.23	5.90	n.a.	n.a.	5.97	6.03	5.79	5.80	5.48

n.a.—Not available.

PRINCIPAL VEGETABLE CROPS FOR PROCESSING—Cont.

CUCUMBERS FOR PICKLES—PRODUCTION—1,000 TONS (Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Indiana	6.6	6.9	6.8	n.a.	n.a.	8.8	12.9	11.9	12.2	11.4
Michigan	117.8	105.1	100.8	n.a.	n.a.	117.2	134.4	139.2	160.8	126.5
New Jersey	9.6	11.2	10.5	n.a.	n.a.	10.4	7.3	6.5	4.9	3.5
Ohio	80.2	62.5	63.7	n.a.	n.a.	56.3	60.5	57.2	46.8	36.3
Wisconsin	64.0	53.7	47.9	n.a.	n.a.	61.4	62.0	54.0	45.8	46.9
NORTHERN	278.2	239.3	229.5	n.a.	n.a.	254.1	277.0	268.8	270.5	224.6
Alabama	(a)	(a)	(a)	n.a.	n.a.	(a)	(a)	(a)	(a)	(a)
Florida	28.4	28.8	20.0	n.a.	n.a.	21.2	24.0	24.2	23.4	36.0
Delaware	7.7	7.2	7.5	n.a.	n.a.	7.2	6.5	(a)	(a)	(a)
Maryland	27.0	26.3	28.4	n.a.	n.a.	26.3	28.4	21.1	16.3	(a)
Mississippi	(a)	(a)	(a)	n.a.	n.a.	(a)	(a)	(a)	(a)	(a)
N. Carolina	80.1	88.5	81.6	n.a.	n.a.	86.1	99.2	81.0	84.5	99.8
S. Carolina	26.8	22.6	27.6	n.a.	n.a.	35.3	48.6	45.8	38.9	39.8
Texas	36.7	41.0	23.8	n.a.	n.a.	40.8	37.5	42.6	47.0	53.6
Virginia	11.3	10.4	6.1	n.a.	n.a.	(a)	(a)	.....	(a)	(a)
SOUTHERN	217.9	224.7	195.0	n.a.	n.a.	216.9	244.2	214.6	210.1	229.2
California	68.8	52.6	63.2	n.a.	n.a.	56.4	73.5	64.7	61.5	69.0
Colorado	18.4	23.0	16.2	n.a.	n.a.	18.9	19.1	14.6	12.5	16.3
Oregon	17.3	18.8	21.6	n.a.	n.a.	25.0	25.5	22.6	23.0	26.6
Washington	13.8	13.8	15.2	n.a.	n.a.	16.8	16.8	15.3	17.0	14.3
WESTERN	118.3	108.2	116.2	n.a.	n.a.	117.1	134.9	117.1	113.9	126.2
OTHER STATES	54.6	37.0	34.7	n.a.	n.a.	30.2	38.4	39.0	40.9	71.0
PROCESSING ...	669.0	609.2	575.4	n.a.	n.a.	618.2	694.4	639.6	635.5	650.9
FRESH MKT	296.1	307.2	301.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
TOT. U.S.	965.1	916.3	877.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

(a) Included in "OTHER STATES". n.a. - Not available.

CUCUMBERS FOR PICKLES—VALUE PER TON—DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Indiana	126.00	119.00	121.00	n.a.	n.a.	130.00	131.00	119.00	160.00	148.00
Michigan	132.00	125.00	135.00	n.a.	n.a.	147.00	158.00	146.00	139.00	156.00
New Jersey	154.00	167.00	165.00	n.a.	n.a.	206.00	204.00	193.00	194.00	197.00
Ohio	150.00	168.00	189.00	n.a.	n.a.	185.00	197.00	192.00	178.00	198.00
Wisconsin	146.00	170.00	142.00	n.a.	n.a.	105.00	125.00	160.00	163.00	187.00
Alabama	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Florida	197.00	364.00	294.00	n.a.	n.a.	301.00	275.00	278.00	316.00	300.00
Delaware	128.00	147.00	156.00	n.a.	n.a.	137.00	144.00	n.a.	n.a.	n.a.
Maryland	113.00	138.00	162.00	n.a.	n.a.	147.00	143.00	193.00	203.00	n.a.
Mississippi	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
N. Carolina	156.00	174.00	195.00	n.a.	n.a.	171.00	198.00	195.00	196.00	206.00
S. Carolina	158.00	176.00	182.00	n.a.	n.a.	196.00	191.00	189.00	192.00	216.00
Texas	173.00	186.00	248.00	n.a.	n.a.	155.00	228.00	200.00	236.00	269.00
Virginia	120.00	125.00	143.00	n.a.	n.a.	n.a.	n.a.	.....	n.a.	n.a.
California	147.00	165.00	199.00	n.a.	n.a.	232.00	189.00	200.00	198.00	213.00
Colorado	105.00	149.00	130.00	n.a.	n.a.	131.00	133.00	139.00	169.00	123.00
Oregon	137.00	144.00	157.00	n.a.	n.a.	155.00	170.00	156.00	157.00	177.00
Washington	135.00	145.00	159.00	n.a.	n.a.	162.00	185.00	160.00	180.00	187.00
U.S. PROC. AV ..	145.00	166.00	175.00	n.a.	n.a.	168.00	178.00	177.00	180.00	200.00

n.a.—Not available.

PRINCIPAL VEGETABLE CROPS FOR PROCESSING—Cont.
CUCUMBERS FOR PICKLES—TOTAL VALUE—1,000 DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Indiana	833	815	819	n.a.	n.a.	1,145	1,687	1,411	1,958	1,687
Michigan	15,551	13,135	13,601	n.a.	n.a.	17,221	21,235	20,323	22,351	19,734
New Jersey	1,478	1,870	1,726	n.a.	n.a.	2,142	1,483	1,258	951	688
Ohio	12,030	10,505	12,030	n.a.	n.a.	10,416	11,915	10,990	8,330	7,181
Wisconsin	9,340	9,126	6,795	n.a.	n.a.	6,446	7,748	8,640	7,461	8,774
NORTHERN† ...	39,232	35,451	34,971	n.a.	n.a.	37,370	44,068	42,622	41,051	38,064
Alabama	(a)	(a)	(a)	n.a.	n.a.	(a)	(a)	(a)	(a)	(a)
Florida	5,585	10,483	5,880	n.a.	n.a.	6,366	6,600	6,728	7,394	10,800
Delaware	984	1,058	1,170	n.a.	n.a.	981	940	(a)	(a)	(a)
Maryland	3,054	3,623	4,606	n.a.	n.a.	3,865	4,054	4,070	3,305	(a)
Mississippi	(a)	(a)	(a)	n.a.	n.a.	(a)	(a)	(a)	(a)	(a)
N. Carolina	12,494	15,397	15,912	n.a.	n.a.	14,728	19,648	15,787	16,556	20,569
S. Carolina	4,236	3,969	5,016	n.a.	n.a.	6,927	9,273	8,647	7,476	8,588
Texas	6,347	7,622	5,905	n.a.	n.a.	6,365	8,555	8,528	11,101	14,413
Virginia	1,350	1,300	868	n.a.	n.a.	(a)	(a)	.....	(a)	(a)
SOUTHERN† ...	34,050	43,452	39,357	n.a.	n.a.	39,232	49,070	43,760	45,832	54,370
California	10,117	8,672	12,579	n.a.	n.a.	13,092	13,886	12,936	12,177	14,699
Colorado	1,927	3,428	2,106	n.a.	n.a.	2,473	2,535	2,022	2,114	2,002
Oregon	2,374	2,712	3,385	n.a.	n.a.	3,875	4,338	3,527	3,603	4,712
Washington	1,863	1,998	2,422	n.a.	n.a.	2,717	3,108	2,448	3,055	2,676
WESTERN†	16,281	16,810	20,492	n.a.	n.a.	22,157	23,867	20,933	20,949	24,089
OTHER STATES	7,623	5,551	5,809	n.a.	n.a.	5,064	6,634	6,085	6,542	13,439
PROCESSING ...	97,186	101,264	100,629	n.a.	n.a.	103,823	123,639	113,400	114,374	129,962

(a)—Included in "OTHER STATES" †Area totals do not include quantities in "OTHER STATES".

PEAS, GREEN—HARVESTED ACREAGE—1,000 ACRES (Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Delaware	10.0	5.8	7.8	7.9	9.4	11.5	12.4	9.6	9.7	7.7
Maryland	7.6	4.0	4.2	3.1	2.9	2.5	1.9	(a)	(a)	(a)
New York	6.2	6.0	7.8	8.8	9.2	9.2	12.0	8.7	9.9	9.7
EAST†	23.8	15.8	19.8	19.8	21.5	23.2	26.3	18.3	19.6	17.4
Michigan	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Minnesota	73.0	66.3	56.8	60.8	64.2	74.2	81.5	72.7	76.3	75.4
Wisconsin	109.6	101.1	84.2	79.1	81.0	86.2	98.1	70.9	82.5	79.9
MID-WEST†	182.6	167.4	141.0	139.9	145.2	160.4	179.6	143.6	158.8	155.3
California	10.3	5.9	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Colorado	.4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Idaho	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Oregon	42.0	32.6	32.3	33.7	34.4	33.6	35.4	29.2	33.3	26.0
Washington	81.1	57.8	59.6	67.7	65.6	64.4	61.5	47.6	41.5	48.2
WEST†	133.8	96.3	91.9	101.4	100.0	98.0	96.9	76.8	74.8	74.2
OTHER STATES	52.1	42.2	40.4	42.7	42.1	48.9	50.8	33.7	37.1	38.3
For Freezing ..	155.4	118.2	119.1	152.6	150.5	158.9	171.2	128.2	132.3	136.2
For Canning ...	236.9	203.5	174.0	151.3	158.3	171.6	182.4	144.2	158.0	149.0
T. U.S. PROC	392.3	321.7	293.1	303.8	308.8	330.5	353.6	272.4	290.3	285.2

(a) Included in "OTHER STATES". †Area totals do not include quantities in "OTHER STATES".

PRINCIPAL VEGETABLE CROPS FOR PROCESSING—Continued

PEAS, GREEN—YIELD PER ACRE—POUNDS SHELLED

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Delaware	2,640	3,060	3,200	3,460	2,940	2,800	3,580	3,220	2,560	3,060
Maryland	3,400	3,100	3,560	3,440	2,340	3,260	4,240	n.a.	n.a.	n.a.
New York	3,360	3,360	3,700	3,400	3,000	3,280	4,680	3,700	3,280	2,400
Michigan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Minnesota	3,060	2,360	3,080	3,200	2,500	2,760	3,160	2,600	2,740	1,360
Wisconsin	3,240	3,040	2,980	3,740	2,720	2,960	3,280	3,220	2,780	1,360
California	3,920	3,320	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Colorado	2,640	.....	.....	.....	.....	.....	.....	.....	.....	.....
Idaho	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Oregon	2,140	3,320	2,740	2,180	2,340	2,960	2,440	2,340	2,620	2,880
Washington	3,440	3,300	2,960	3,200	2,980	3,400	3,200	3,420	4,120	3,740
For Freezing ..	3,160	3,100	3,100	3,020	2,720	3,100	3,300	3,100	3,220	2,700
For Canning ...	3,120	2,960	3,120	3,520	2,800	2,900	3,240	3,000	2,860	1,700
U.S. PROC. AV. .	3,120	3,020	3,100	3,260	2,760	3,000	3,260	3,040	3,020	2,180

n.a.—Not available.

PEAS, GREEN—PRODUCTION—1,000 TONS SHELLED

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Delaware	13.2	8.9	12.5	13.7	13.8	16.1	22.2	15.5	12.4	11.8
Maryland	12.9	6.2	7.5	5.3	3.4	4.1	4.0	(a)	(a)	(a)
New York	10.4	10.1	14.4	15.0	13.8	15.1	28.1	16.1	16.2	11.6
EAST†	36.5	25.2	34.4	34.0	31.0	35.3	54.3	31.6	28.7	23.4
Michigan	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Minnesota	111.7	78.2	87.5	97.3	80.3	102.4	128.8	94.5	104.5	51.3
Wisconsin	177.6	153.7	125.5	147.9	110.2	127.6	160.9	114.2	114.7	54.3
MID-WEST†	289.2	231.9	212.9	245.2	190.4	230.0	289.7	208.7	219.2	105.6
California	20.2	9.8	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Colorado	.5	.....	.....	.....	.....	.....	.....	.....	.....	.....
Idaho	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Oregon	44.9	54.1	44.3	36.7	40.3	49.7	43.2	34.2	43.6	37.4
Washington	139.5	95.4	88.2	108.3	97.7	109.5	98.4	81.4	85.5	90.1
WEST†	205.1	159.3	132.5	145.1	138.0	159.2	141.6	115.6	129.1	127.6
OTHER STATES	82.5	67.9	75.3	72.1	66.3	70.9	92.3	59.1	62.6	54.5
For Freezing ..	244.8	182.9	184.2	230.7	204.8	246.3	282.3	198.7	213.4	184.2
For Canning ...	368.6	301.3	270.8	265.6	220.9	249.0	295.6	216.2	226.1	126.8
T. U.S. PROC. ...	613.4	484.2	465.1	496.3	425.7	495.3	577.8	414.9	439.5	311.1

(a) Included in "OTHER STATES". †Area totals do not include quantities in "OTHER STATES".

PEAS, GREEN—VALUE PER TON—DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Delaware	199.00	248.00	238.00	270.00	209.00	276.00	277.00	239.00	229.00	180.00
Maryland	187.00	261.00	245.00	275.00	232.00	282.00	304.00	n.a.	n.a.	n.a.
New York	249.00	278.00	284.00	286.00	285.00	301.00	305.00	281.00	261.00	290.00
Michigan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Minnesota	220.00	244.00	230.00	236.00	229.00	243.00	240.00	232.00	214.00	268.00
Wisconsin	195.00	197.00	218.00	199.00	215.00	222.00	226.00	208.00	217.00	251.00
California	249.00	230.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Colorado	270.00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Idaho	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Oregon	169.00	173.00	179.00	202.00	173.00	211.00	204.00	198.00	200.00	192.00
Washington	222.00	193.00	203.00	235.00	205.00	246.00	240.00	251.00	254.00	237.00
For Freezing ..	218.00	202.00	206.00	240.00	212.00	244.00	252.00	244.00	238.00	227.00
For Canning ...	205.00	214.00	226.00	215.00	220.00	230.00	228.00	210.00	211.00	246.00
U.S. PROC. AV ..	210.00	209.00	218.00	227.00	217.00	237.00	240.00	226.00	224.00	235.00

n.a.- Not available.

PEAS, GREEN—TOTAL VALUE—1,000 DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Delaware	2,627	2,195	2,970	3,691	2,888	4,444	6,149	3,695	2,844	2,120
Maryland	2,416	1,618	1,833	1,466	786	1,151	1,225	(a)	(a)	(a)
New York	2,595	2,802	4,098	4,279	3,933	4,542	8,564	4,524	4,239	3,376
EAST†	7,638	6,615	8,901	9,436	7,607	10,137	15,938	8,219	7,083	5,496
Michigan	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Minnesota	24,572	19,088	20,118	22,958	18,377	24,883	30,905	21,926	22,369	13,740
Wisconsin	34,622	30,273	27,350	29,436	23,684	28,323	36,359	23,743	24,886	13,637
MID-WEST†	59,194	49,361	47,468	52,394	42,061	53,206	67,264	45,669	47,255	27,377
California	5,027	2,251	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Colorado	135	.....	.....	.....	.....	.....	.....	.....	.....	.....
Idaho	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Oregon	7,595	9,363	7,921	7,419	6,963	10,493	8,811	6,764	8,724	7,188
Washington	30,967	18,406	17,907	25,455	20,037	26,932	23,616	20,431	21,714	21,361
WEST†	43,724	27,769	25,828	32,874	27,000	37,425	32,427	27,195	30,438	28,549
OTHER STATES	18,534	15,396	16,859	17,837	15,521	16,498	22,860	12,698	13,800	11,666
For Freezing ..	53,380	36,865	37,918	55,394	43,495	60,045	71,177	48,459	50,874	41,898
For Canning ...	75,710	64,527	61,138	57,147	48,694	57,221	67,312	45,322	47,702	31,190
T. U.S. PROC. ...	129,090	101,392	99,056	112,541	92,189	117,266	138,489	93,781	98,576	73,088

(a)-Included in "OTHER STATES".

†Area totals do not include quantities in "OTHER STATES".

Find PEA PACKERS
in The 1988 - 89 DIRECTORY
See SAMPLE PAGES at page 621 this Almanac

PRINCIPAL VEGETABLE CROPS FOR PROCESSING—Cont.

TOMATOES—HARVESTED ACREAGE—1,000 ACRES (Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	2.3
New Jersey	7.0	5.4	5.4	5.6	4.4	4.0	4.2	3.0	2.9	3.3
Pennsylvania	4.4	3.4	4.8	5.0	5.0	3.3	2.8	2.9	2.1	2.0
†MIDATLANT ..	11.4	8.8	10.2	10.6	9.4	7.3	7.0	5.9	5.0	7.6
Delaware	(a)	(a)	(a)	1.2	.8	.8	1.1	(a)	(a)	1.0
Maryland	2.8	3.4	3.3	4.1	2.6	2.9	2.3	1.8	1.7	2.7
Virginia	3.6	2.1	1.4	1.8	1.7	1.2	1.4	(a)	(a)	(a)
†DELMARVA ...	6.4	5.5	4.7	7.1	5.1	4.9	4.8	1.8	1.7	3.7
Ohio	18.7	16.8	14.1	18.8	19.0	15.9	15.9	14.8	16.0	17.7
Indiana	10.6	9.6	5.7	6.7	7.6	7.6	6.8	6.4	6.7	7.5
Illinois	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Michigan	5.6	6.0	6.2	9.7	9.2	7.4	6.6	5.4	5.0	5.2
†NO. CENTRAL ..	34.9	32.4	26.0	35.2	35.8	30.9	29.3	26.6	27.7	30.4
Florida	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Texas	2.6	1.4	1.2	2.7	(a)	(a)	(a)	(a)	(a)	(a)
†SOUTH	2.0	1.4	1.2	2.7	(a)	(a)	(a)	(a)	(a)	(a)
Colorado	.8	.5	.7	.9	1.1	1.0	.9	.7	6.	.7
New Mexico	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	.....
Utah	(a)	(a)	(a)	(a)	(a)	(a)	.....	(a)	(a)	.....
California	250.0	208.3	204.3	232.0	233.5	239.7	217.0	210.4	214.0	226.1
†WEST	250.8	208.8	205.0	232.9	234.6	240.7	217.9	211.1	214.6	226.8
OTHER STS	6.6	6.2	6.8	6.8	7.1	8.1	6.5	6.7	8.1	6.4
PROCESSING ...	312.0	263.0	253.9	296.3	292.0	291.9	265.5	252.1	257.1	274.9
FRESH MKT ...	125.2	126.3	127.0	119.7	123.3	122.9	124.6	127.1	129.6	135.0
TOT. U.S.	437.2	389.3	380.9	415.0	415.3	414.8	390.1	379.2	386.7	409.9

† Area totals do not include quantities in "Other States". (a) Included in "Other States".

Hunting...



for current information
about West Coast
processed fruits, vegetables,
dried fruit, tree nuts?

YOU'RE
LOOKING IN THE
RIGHT PLACE
when you read

PACIFIC FRUIT NEWS

every week!

P.O. Box 1175, Watsonville, CA 95077

Tel: (408) 728-3113

Annual subscription - \$34.00 U.S., Canada & Mexico.

Other countries - \$36.00. Mailed 2nd. class. 1st class or air mail postage extra.

PRINCIPAL VEGETABLE CROPS FOR PROCESSING—Cont.

TOMATOES—YIELD PER ACRE—TONS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	17.0
New Jersey	14.0	11.5	18.0	19.1	15.7	19.7	22.0	17.4	19.4	12.7
Pennsylvania	16.7	11.9	16.7	16.9	16.4	18.1	19.5	17.6	14.1	13.9
Delaware	n.a.	n.a.	n.a.	14.9	13.4	18.1	12.7	n.a.	n.a.	6.7
Maryland	12.8	7.9	15.0	15.8	13.6	18.1	17.9	13.8	13.2	9.0
Virginia	11.9	8.6	13.0	15.4	7.4	12.0	18.0	n.a.	n.a.	n.a.
Ohio	18.7	15.0	18.0	19.6	21.4	24.5	25.5	26.0	23.0	20.3
Indiana	14.6	11.1	14.6	20.8	18.4	21.3	20.6	21.6	23.4	20.8
Illinois	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Michigan	18.1	12.3	19.1	21.1	19.9	23.5	25.2	24.7	23.7	21.6
Florida	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Texas	8.7	7.1	5.3	9.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Colorado	10.8	13.0	14.2	16.1	16.0	14.0	20.1	16.7	12.9	18.2
New Mexico	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	.....
Utah	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	.....	n.a.	n.a.	.....
California	25.4	26.6	24.0	26.5	25.6	27.5	28.1	30.8	31.3	29.0
U.S. PROC. AV ..	23.5	23.6	22.5	24.7	24.1	26.3	27.0	29.3	29.6	27.0

TOMATOES—PRODUCTION—1,000 TONS (Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	39.2
New Jersey	98.6	62.0	97.0	106.8	69.1	78.6	92.2	52.3	56.3	41.9
Pennsylvania	73.3	40.4	80.0	84.3	82.2	59.8	54.5	51.1	29.7	27.9
†MIDATLANT ..	171.3	102.4	177.0	191.0	151.2	138.5	146.7	103.4	86.0	109.0
Delaware	(a)	(a)	(a)	17.8	11.2	14.8	13.9	(a)	(a)	6.7
Maryland	35.9	26.9	49.6	64.6	35.3	52.6	41.2	24.8	22.4	24.3
Virginia	43.0	18.0	18.2	27.7	12.5	14.4	25.2	(a)	(a)	(a)
†DELMARVA ...	78.9	44.9	67.8	110.1	59.0	81.8	80.3	24.8	22.4	31.0
Ohio	349.3	252.0	253.1	368.1	406.6	389.6	405.0	384.8	368.0	359.3
Indiana	154.8	106.6	83.4	139.6	139.6	162.0	140.1	138.1	156.9	156.2
Illinois	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Michigan	101.4	73.7	118.3	204.7	183.1	173.9	166.3	133.4	118.5	112.3
† NO. CENT	605.5	432.2	454.8	712.3	729.3	725.5	711.4	656.3	643.4	627.8
Florida	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Texas	17.4	9.9	6.4	24.6	(a)	(a)	(a)	(a)	(a)	(a)
†SOUTH	17.4	9.9	6.4	24.6	(a)	(a)	(a)	(a)	(a)	(a)
Colorado	8.1	6.1	9.9	13.8	17.6	13.8	17.3	10.8	7.6	12.3
New Mexico	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	.....
Utah	(a)	(a)	(a)	(a)	(a)	(a)	.....	(a)	(a)	.....
California	6,350.0	5,540.8	4,903.2	6,148.0	5,972.9	6,591.8	6,102.0	6,480.3	6,702.5	6,547.9
†WEST	6,358.1	5,546.9	4,913.1	6,161.8	5,990.5	6,605.6	6,119.3	6,491.2	6,710.1	6,560.2
OTHER STS	98.4	74.3	97.1	99.1	99.8	129.8	119.5	117.7	140.2	82.0
PROCESSING ...	7,329.5	6,210.6	5,716.1	7,299.0	7,029.8	7,681.2	7,177.1	7,393.3	7,602.0	7,409.9
FRESH MKT ...	1,164.6	1,269.7	1,299.1	1,338.5	1,361.9	1,409.5	1,494.9	1,577.7	1,591.9	1,742.2
TOT. U.S.	8,494.1	7,480.3	7,015.2	8,637.5	8,391.7	9,090.6	8,672.0	8,971.0	9,193.9	9,152.2

†Area totals do not include quantities in Other States.

(a) Included in Other States.

n.a. Not available.

PRINCIPAL VEGETABLE CROPS FOR PROCESSING—Cont.

TOMATOES—VALUE PER TON—DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	76.40
New Jersey	70.20	74.20	86.60	87.40	83.00	80.40	75.00	72.80	72.00	75.00
Pennsylvania	65.80	71.20	80.50	86.30	83.50	79.90	75.50	72.50	75.60	75.90
Delaware	n.a.	n.a.	n.a.	84.40	71.50	76.50	72.10	n.a.	n.a.	74.10
Maryland	60.70	71.00	79.50	82.00	75.50	76.70	72.70	69.60	78.00	74.90
Virginia	70.40	73.60	82.20	85.40	79.30	81.80	80.90	n.a.	n.a.	n.a.
Ohio	67.80	71.10	85.40	89.10	84.70	83.10	77.20	74.30	71.70	71.60
Indiana	72.70	74.30	89.00	89.50	86.90	84.60	79.20	81.10	75.30	80.90
Illinois	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Michigan	68.30	72.90	86.00	92.60	84.00	84.00	80.00	76.00	69.20	68.20
Florida	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Texas	62.10	67.50	75.00	75.70	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Colorado	64.60	66.90	72.10	67.60	69.80	79.70	71.10	67.60	84.20	72.70
New Mexico	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	.....
Utah	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	.....	n.a.	n.a.	.....
California	67.50	59.70	64.70	68.50	65.70	64.80	64.10	62.20	57.20	58.90
PROC. AV.	67.60	61.00	67.50	71.60	68.40	67.40	66.30	63.90	59.10	60.70

TOMATOES—TOTAL VALUE—1,000 DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	2,994
New Jersey	6,880	4,600	8,398	9,333	5,734	6,323	6,914	3,805	4,051	3,143
Pennsylvania	4,821	2,875	6,442	7,271	6,860	4,780	4,112	3,705	2,245	2,115
†MIDATLANT ..	11,701	7,475	14,840	16,604	12,594	11,103	11,026	7,510	6,296	8,252
Delaware	(a)	(a)	(a)	1,505	802	1,134	1,005	(a)	(a)	498
Maryland	2,179	1,910	3,943	5,299	2,664	4,033	2,993	1,726	1,749	1,820
Virginia	3,024	1,322	1,496	2,361	992	1,178	2,039	(a)	(a)	(a)
†DELMARVA ...	5,203	3,232	5,439	9,165	4,458	6,345	6,037	1,726	1,749	2,318
Ohio	23,684	17,917	21,615	32,798	34,439	32,372	31,264	28,591	26,386	25,727
Indiana	11,251	7,917	7,422	12,491	12,132	13,708	11,094	11,201	11,811	12,633
Illinois	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Michigan	6,927	5,371	10,174	18,952	15,379	14,608	13,306	10,137	8,200	7,660
†NO. CENT	41,862	31,205	39,211	64,241	61,950	80,888	55,664	49,929	46,397	46,020
Florida	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Texas	1,081	671	478	1,860	(a)	(a)	(a)	(a)	(a)	(a)
†SOUTH	1,081	671	478	1,860	(a)	(a)	(a)	(a)	(a)	(a)
Colorado	523	409	715	935	1,225	1,101	1,230	733	639	897
New Mexico	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	.....
Utah	(a)	(a)	(a)	(a)	(a)	(a)	.....	(a)	(a)	.....
California	428,625	330,785	317,237	421,138	392,422	427,145	391,141	403,076	383,382	385,669
†WEST	429,148	331,194	317,952	422,073	393,647	428,246	392,371	403,809	384,021	386,566
OTHER STS	6,481	5,076	7,712	8,479	8,277	11,106	10,611	9,564	10,617	6,641
PROCESSING ...	495,476	378,853	385,632	522,422	480,926	517,488	475,709	472,538	449,080	449,797

(a) Included in OTHER STATES.
Not available.

†Area totals do not include quantities in OTHER STATES. n.a.

COMMODITY SUMMARIES—HARVESTED ACREAGE—1,000 ACRES

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Beans, Lima	65.4	50.8	49.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Beans, Snap	285.4	255.7	218.3	204.4	196.7	216.6	222.2	190.6	221.2	223.4
Beets	17.4	13.3	10.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cabbage/Kraut ..	9.8	9.1	10.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corn, Sweet	417.6	375.4	401.0	446.9	399.8	427.2	435.3	413.4	430.9	438.5
Cucumbers										
for Pickles	131.7	116.4	97.5	n.a.	n.a.	103.6	115.2	110.5	109.6	118.8
Peas, Green	392.3	321.7	293.1	303.8	308.8	330.5	353.6	272.4	290.3	285.2
Spinach	20.8	21.6	19.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tomatoes	312.0	263.0	253.9	295.3	292.0	291.9	265.5	252.1	257.1	274.9
TOTAL ABOVE ..	1,652.5	1,427.1	1,353.5	1,250.5	1,197.4	1,369.8	1,391.8	1,238.9	1,309.2	1,340.7

COMMODITY SUMMARIES—YIELD PER ACRE—TONS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Beans, Lima	1.36	1.21	1.31	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Beans, Snap	2.69	2.75	3.08	3.15	2.99	3.07	3.16	3.20	3.06	2.69
Beets	14.32	15.40	15.59	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cabbage/Kraut ..	24.27	22.87	24.22	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corn, Sweet	5.90	5.75	5.93	6.13	5.57	5.97	6.06	6.19	6.65	5.41
Cucumbers										
for Pickles	5.08	5.23	5.90	n.a.	n.a.	5.97	6.03	5.79	5.80	5.48
Peas, Green	1.56	1.51	1.55	1.63	1.38	1.50	1.63	1.52	1.51	1.09
Spinach	7.43	7.61	7.69	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tomatoes	23.49	23.61	22.51	24.72	24.67	26.32	27.03	29.33	29.57	26.95

COMMODITY SUMMARIES—PRODUCTION—1,000 TONS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Beans, Lima	89.2	61.3	65.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Beans, Snap	769.1	704.2	672.2	643.9	587.4	666.1	702.5	609.4	679.0	601.3
Beets	249.7	205.4	155.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cabbage/Kraut ..	237.8	209.0	246.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corn, Sweet	2,463.9	2,158.0	2,378.2	2,740.5	2,227.1	2,552.2	2,640.0	2,559.4	2,866.6	2,374.2
Cucumbers										
for Pickles	669.0	609.2	575.4	n.a.	n.a.	618.2	694.4	639.6	635.5	650.9
Peas, Green	613.4	484.2	455.1	496.3	425.7	495.3	577.8	414.9	439.5	311.1
Spinach	154.4	164.7	152.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tomatoes	7,329.5	6,210.6	5,716.1	7,299.0	7,029.8	7,681.2	7,177.1	7,393.3	7,602.0	7,409.9
TOTAL ABOVE ..	12,576.0	10,806.6	10,416.5	11,179.6	10,270.1	12,013.0	11,791.9	11,616.6	12,222.6	11,347.4

COMMODITY SUMMARIES—VALUE PER TON—DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Beans, Lima	368.00	410.00	440.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Beans, Snap	153.00	156.00	166.00	166.00	160.00	171.00	169.00	159.60	159.70	166.30
Beets	42.20	47.20	47.20	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cabbage/Kraut ..	31.60	34.10	36.80	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corn, Sweet	51.30	53.70	63.10	61.40	59.80	63.70	63.40	58.90	59.30	61.40
Cucumbers										
for Pickles	145.00	166.00	175.00	n.a.	n.a.	168.00	178.00	177.30	180.00	199.70
Peas, Green	210.00	209.00	218.00	227.00	217.00	237.00	240.00	226.00	224.30	235.00
Spinach	86.10	91.90	86.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tomatoes	67.60	61.00	67.50	71.60	68.40	67.40	66.30	63.90	59.10	60.70

COMMODITY SUMMARIES—TOTAL VALUE—1,000 DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Beans, Lima	32,831	25,137	28,600	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Beans, Snap	117,869	110,034	111,394	106,610	94,252	113,935	118,799	97,262	108,436	100,010
Beets	10,536	9,685	7,348	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cabbage/Kraut ..	7,525	7,121	9,045	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corn, Sweet	126,439	115,824	150,048	168,165	133,233	162,530	167,297	150,821	169,984	145,675
Cucumbers										
for pickles	97,186	101,264	100,629	n.a.	n.a.	103,823	123,639	113,400	114,374	129,962
Peas, Green	129,090	101,392	99,056	112,541	92,189	117,266	138,489	93,781	98,576	73,088
Spinach	13,287	15,139	13,144	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tomatoes	495,476	378,853	385,632	522,422	480,926	517,488	475,709	472,538	449,080	449,797
TOTAL ABOVE ..	1,030,239	864,449	904,896	909,738	800,600	1,015,042	1,023,933	927,802	940,450	898,532

PRINCIPAL VEGETABLE CROPS FOR PROCESSING—Cont.

*STATE SUMMARIES—HARVESTED ACREAGE—1,000 ACRES

State	1979	1980	1981	*1982	*1983	*1984	*1985	*1986	*1987	*1988
Maine	8.0	7.6	8.2	8.9	8.5	9.9	10.4	(a)	(a)	(a)
New Hamp .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vermont .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass	1.6	.9	.7	.....	.....	.6	.6	.5	.4	.4
Conn .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York	83.0	78.9	77.6	70.9	70.1	71.8	76.9	62.5	68.1	65.6
New Jersey	16.8	14.7	15.5	14.9	10.6	14.6	15.8	10.7	12.7	10.2
Penna	14.6	15.0	16.1	17.4	15.0	13.5	13.5	12.8	14.2	13.5
N. ATLANT	124.1	117.0	118.2	112.1	104.2	110.4	117.1	86.5	95.4	89.6
Ohio	26.5	24.2	20.9	19.0	19.1	20.7	21.0	19.6	20.8	21.8
Indiana	20.3	18.3	9.3	9.6	11.0	15.8	12.6	10.4	15.8	16.3
Illinois	95.0	74.4	68.2	58.8	55.3	61.3	57.2	44.2	45.7	56.6
Michigan	51.5	42.0	38.9	26.8	26.7	48.7	53.3	50.3	51.0	50.2
Wisconsin	338.9	308.7	287.0	265.8	271.3	300.6	322.0	278.1	316.9	307.0
Minnesota	178.1	174.0	168.6	184.7	176.7	194.7	206.1	202.0	194.4	207.3
Iowa	5.7	3.8	4.4	5.5	4.7	5.6	5.3	4.1	4.3	5.8
Missouri	.5	1.5	.9	.5	.4	1.2	1.7	(a)	(a)	(a)
N. Dakota .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Dakota	.1	.1	(c)	.....	.....	(a)	(a)	(a)	.....	.....
Nebraska	.1	.5	.2	.....	.....	(a)	(a)	(a)	(a)	.....
Kansas .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. CENT	716.6	647.4	598.4	570.7	565.3	648.5	679.1	608.7	648.9	665.1
Delaware	30.4	26.1	26.7	16.7	17.2	21.7	22.8	19.8	20.9	17.5
Maryland	36.0	26.9	24.5	18.4	16.7	19.5	19.4	16.3	14.2	17.0
Virginia	11.7	8.3	5.1	3.6	2.1	3.2	2.7	.9	3.3	1.9
W. Va.	.1	(c)	(c)	(c)	(c)	(a)	(a)	.....	.....	.....
N.C.	32.7	28.8	28.0	2.4	2.1	27.6	31.1	25.7	25.3	26.2
S.C.	10.9	8.7	10.9	.4	.1	9.5	13.8	13.6	13.6	11.5
Georgia	4.6	2.9	3.9	.9	1.3	2.6	3.0	2.5	2.8	2.4
Florida	22.8	17.0	8.9	3.8	2.1	8.6	7.3	5.9	5.2	8.1
S. ATLANT	149.2	118.8	107.9	46.2	41.7	92.6	100.1	84.7	85.2	84.6
Kentucky	1.2	1.0	.7	.....	.....	(a)	(a)	(a)	(a)	(a)
Tenn	10.9	13.7	9.2	6.9	4.9	5.3	5.0	5.3	5.4	6.1
Alabama	8.4	2.6	1.9	1.3	1.3	2.0	1.2	2.5	3.2	1.3
Miss	3.5	3.5	1.1	.....	.....	(a)	(a)	(a)	(a)	(a)
Arkansas	6.5	4.7	6.2	3.6	3.3	3.1	3.4	2.9	3.9	5.4
Louisiana	.2	.2	.....	.....	.....	.....	.....	.....	.....	(a)
Oklahoma	2.2	4.2	4.4	1.3	.8	(a)	(a)	(a)	(a)	(a)
Texas	20.3	18.4	12.8	5.3	4.1	13.5	10.6	10.6	14.3	18.3
S. CENT	53.1	48.2	36.3	18.4	14.4	23.9	20.2	21.2	26.8	31.1
Montana .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Idaho	35.2	30.9	28.2	29.1	24.8	27.9	28.4	26.6	27.2	29.0
Wyoming .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colorado	4.9	3.9	3.5	1.4	1.1	3.2	3.5	2.2	1.9	2.2
New Mexico	.3	.4	.2	.2	.2	(a)	(a)	(a)	(a)	.....
Arizona	.5	.4	.2	.....	.....	(a)	(a)	(a)	(a)	(a)
Utah	4.7	4.9	4.5	2.6	2.6	2.3	2.4	1.2	2.3	2.3
Wash	127.9	100.6	106.8	121.5	105.3	99.9	103.6	85.8	88.9	99.6
Oregon	122.7	101.5	103.0	104.9	95.6	101.5	99.3	88.3	94.4	87.0
Calif	313.4	253.2	246.3	243.4	242.2	255.1	233.4	222.4	227.0	238.8
WESTERN	609.6	495.8	492.6	503.1	471.8	489.9	470.6	426.5	441.8	458.9
OTHER STATES .....	.....	.....	.....	.....	.....	4.4	4.6	11.4	11.1	11.5
T. U.S. PROC....	1,652.5	1,427.1	1,353.5	1,250.4	1,197.4	1,369.8	1,391.8	1,238.9	1,309.2	1,340.7

*Up thru 1981 includes lima beans, snap beans, beets, cabbage/kraut, sweet corn, cucumbers for pickles, green peas, spinach, tomatoes. Beginning in 1982 includes snap beans, corn, green peas, tomatoes, with cucumbers added back in 1984. (a) Included in "OTHER STATES". (c) Less than 50 acres.

PRINCIPAL VEGETABLE CROPS FOR PROCESSING-Cont.
***STATE SUMMARIES—PRODUCTION—1,000 TONS**

State	1979	1980	1981	*1982	*1983	*1984	*1985	*1986	*1987	*1988
Maine.....	11.8	8.4	13.1	11.0	9.7	10.6	18.9	(a)	(a)	(a)
New Hamp.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vermont.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass.....	12.7	8.0	8.8	.....	.....	7.8	7.3	8.5	6.3	6.4
Conn.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York.....	420.6	380.8	387.8	275.6	256.6	278.4	266.9	233.1	312.2	201.6
New Jersey.....	124.1	92.2	132.0	131.5	80.4	113.9	131.2	76.3	80.9	57.6
Penn.....	97.9	66.2	109.0	116.0	102.0	93.5	90.2	73.7	57.4	53.0
N. ATLANT.....	667.0	555.5	650.7	534.1	448.6	504.2	514.4	391.5	456.8	318.6
Ohio.....	465.6	343.1	348.8	368.5	406.7	445.9	466.3	442.7	415.3	396.1
Indiana.....	192.0	136.6	102.6	152.0	148.1	202.8	169.2	159.4	198.4	189.4
Illinois.....	373.3	248.6	292.8	261.2	214.0	285.1	299.9	218.6	228.0	188.7
Michigan.....	267.5	234.7	267.7	246.5	227.7	343.2	359.9	326.3	334.9	284.4
Wisconsin.....	1,214.8	1,081.1	1,138.8	900.3	889.1	1,062.7	1,140.5	1,071.8	1,209.9	899.6
Minnesota.....	694.1	647.1	681.7	796.1	590.2	790.2	836.7	851.6	857.6	620.6
Iowa.....	37.0	24.7	27.3	32.3	27.0	34.0	38.8	37.6	45.4	40.0
Missouri.....	1.0	2.1	3.2	1.8	1.3	3.5	5.8	(a)	(a)	(a)
N. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Dakota.....	.2	.2	.1	.....	.....	(a)	(a)	(a)	.....	.....
Nebraska.....	.7	2.4	.9	.....	.....	(a)	(a)	(a)	(a)	.....
Kansas.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. CENT.....	3,246.2	2,720.6	2,863.9	2,758.6	2,504.0	3,167.3	3,317.0	3,108.0	3,289.5	2,618.7
Delaware.....	60.3	55.7	54.3	61.7	49.2	72.3	77.4	58.9	58.8	53.1
Maryland.....	142.9	107.2	132.4	115.9	74.6	138.3	135.5	94.1	80.7	81.4
Virginia.....	67.6	33.2	29.2	32.7	13.2	18.2	28.7	5.3	9.2	14.6
W. Va.....	.9	.2	.5	.3	.3	(a)	(a)	.....	.....	.....
N.C.....	91.3	95.3	93.2	17.7	10.2	93.6	104.8	82.0	85.2	100.6
S.C.....	26.9	23.7	28.3	.4	.1	36.1	49.6	47.6	40.6	41.0
Georgia.....	10.7	7.9	10.7	2.2	2.3	9.6	10.2	6.9	7.6	8.7
Florida.....	88.5	65.0	49.7	24.6	18.9	41.7	41.4	39.1	35.8	51.1
S. ATLANT.....	489.0	388.2	398.2	255.5	168.7	409.6	447.6	334.0	317.8	350.6
Kentucky.....	5.6	4.4	3.2	.....	.....	(a)	(a)	(a)	(a)	(a)
Tenn.....	23.7	21.6	29.1	17.9	8.9	11.3	11.3	7.6	10.8	9.0
Alabama.....	18.3	4.9	5.4	2.6	2.1	2.8	3.2	4.0	5.2	2.1
Miss.....	5.4	2.6	2.8	.....	.....	(a)	(a)	(a)	(a)	(a)
Arkansas.....	16.7	12.2	18.6	10.0	7.3	4.4	7.5	4.3	8.6	11.2
Louisiana.....	.3	.1	.....	.....	.....	.....	.....	.....	.....	(a)
Oklahoma.....	7.0	19.7	22.0	4.5	2.5	(a)	(a)	(a)	(a)	(a)
Texas.....	96.9	98.1	67.9	31.2	22.4	80.3	60.8	59.9	68.2	84.4
S. CENT.....	173.9	163.5	148.9	66.3	43.2	98.8	82.8	75.8	92.8	106.6
Montana.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Idaho.....	213.1	172.1	167.9	200.4	137.7	159.3	165.1	174.1	185.5	183.4
Wyoming.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colorado.....	34.8	32.2	31.8	15.8	17.6	32.7	36.4	25.4	20.1	28.6
New Mexico.....	2.8	4.0	2.3	2.2	2.5	(a)	(a)	(a)	(a)	.....
Arizona.....	1.8	1.6	.5	.....	.....	(a)	(a)	(a)	(a)	(a)
Utah.....	23.3	19.9	20.2	9.5	7.8	8.2	10.4	3.3	9.2	7.9
Wash.....	487.6	432.4	448.6	585.2	452.6	375.7	446.6	397.1	509.7	538.6
Oregon.....	612.5	570.0	573.4	580.1	495.6	568.5	548.3	518.0	528.4	529.8
California.....	6,624.1	5,746.7	5,110.1	6,172.2	5,991.8	6,675.4	6,209.4	6,564.1	6,784.2	6,639.8
WESTERN.....	8,000.0	6,978.9	6,354.8	7,565.2	7,105.6	7,819.7	7,416.2	7,682.0	8,037.1	7,928.1
OTHER STATES.....	.....	.....	.....	.....	.....	13.3	13.9	25.4	28.7	24.8
T. U.S. PROC.....	12,576.0	10,806.6	10,416.5	11,179.6	10,270.1	12,013.0	11,791.9	11,616.6	12,222.6	11,347.4

*Up thru 1981 includes lima beans, snap beans, beets, cabbage/kraut, sweet corn, cucumbers for pickles, green peas, spinach, tomatoes. Beginning in 1982 includes snap beans, corn, green peas, and tomatoes, with cucumbers added back in 1984. (a) Included in "OTHER STATES".

PRINCIPAL VEGETABLE CROPS FOR PROCESSING-Cont.

*STATE SUMMARIES—TOTAL VALUE—1,000 DOLLARS

State	1979	1980	1981	*1982	*1983	*1984	*1985	*1986	*1987	*1988
Maine.....	2,069	1,617	2,179	2,146	2,112	1,853	5,130	(a)	(a)	(a)
New Hamp.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vermont.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mass.....	1,342	874	1,121	.....	.....	1,092	956	1,054	750	790
Conn.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York.....	32,786	33,665	36,602	33,220	30,309	31,338	35,279	24,450	29,291	20,588
New Jersey.....	11,541	10,191	15,239	14,330	7,990	13,626	15,204	8,491	8,929	6,795
Penna.....	7,574	5,748	10,523	11,591	9,557	9,544	9,462	6,411	6,261	6,060
N. ATLANT.....	55,312	52,095	65,664	61,287	49,968	57,453	66,031	40,406	45,231	34,233
Ohio.....	36,954	29,481	34,888	32,841	34,451	42,788	43,279	39,665	34,779	32,970
Indiana.....	14,306	10,368	9,257	13,471	12,868	17,862	14,675	13,655	17,611	18,180
Illinois.....	33,795	26,678	32,360	25,535	21,045	27,777	27,076	16,861	18,987	19,192
Michigan.....	29,311	25,530	30,624	25,333	22,051	39,192	43,547	37,722	38,359	33,881
Wisconsin.....	105,105	97,434	108,331	83,891	85,230	107,098	122,258	105,624	116,578	90,719
Minnesota.....	54,067	49,663	56,267	64,003	46,988	69,188	76,063	64,718	66,750	47,481
Iowa.....	1,949	1,385	1,481	1,810	1,916	2,470	2,889	2,598	2,913	2,632
Missouri.....	138	329	512	280	210	576	633	(a)	(a)	(a)
N. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
S. Dakota.....	27	30	16	.....	.....	(a)	(a)	(a)	.....	.....
Nebraska.....	105	445	184	.....	.....	(a)	(a)	(a)	(a)	.....
Kansas.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N. CENT.....	275,757	241,343	273,920	247,164	224,759	306,951	330,420	280,843	295,977	245,055
Delaware.....	9,349	8,964	10,370	8,258	5,639	9,783	11,369	7,691	7,008	6,155
Maryland.....	14,117	11,905	15,879	10,404	6,197	14,552	13,591	9,264	8,725	9,416
Virginia.....	6,175	3,467	3,181	3,366	1,132	1,921	2,685	514	1,173	1,771
W. Va.....	60	11	37	30	28	(a)	(a)	.....	.....	.....
N.C.....	14,014	16,365	17,328	1,995	1,325	15,782	20,571	15,953	16,703	20,753
S.C.....	4,246	4,180	5,134	85	19	7,017	9,407	8,822	7,668	8,760
Georgia.....	1,705	1,537	2,159	473	497	1,647	1,939	1,253	1,374	1,631
Florida.....	12,155	14,817	8,695	2,220	1,530	8,768	8,310	7,923	8,404	12,219
S. ATLANT.....	61,821	61,246	62,783	26,831	16,367	59,470	67,872	51,420	51,055	60,705
Kentucky.....	732	631	435	.....	.....	(a)	(a)	(a)	(a)	(a)
Tenn.....	3,270	3,352	4,818	3,645	1,784	2,313	2,284	1,508	2,106	1,815
Alabama.....	2,839	653	1,169	447	464	557	698	815	1,103	408
Miss.....	717	345	511	.....	.....	(a)	(a)	(a)	(a)	(a)
Arkansas.....	2,454	1,620	2,752	1,657	1,363	769	1,301	784	1,396	1,964
Louisiana.....	35	11	.....	.....	.....	.....	.....	.....	.....	(a)
Oklahoma.....	653	1,882	2,409	720	397	(a)	(a)	(a)	(a)	(a)
Texas.....	11,745	12,805	10,651	3,012	2,191	10,225	11,708	10,526	13,606	17,784
S. CENT.....	22,445	21,299	22,745	9,481	6,199	13,864	15,991	13,633	18,211	21,971
Montana.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Idaho.....	14,214	12,959	13,937	15,584	11,463	12,531	12,830	12,932	12,866	12,459
Wyoming.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colorado.....	3,322	4,189	3,482	1,208	1,225	3,574	3,765	2,755	2,753	2,899
New Mexico.....	210	340	194	184	213	(a)	(a)	(a)	(a)	.....
Arizona.....	216	216	60	.....	.....	(a)	(a)	(a)	(a)	(a)
Utah.....	2,308	2,245	2,479	2,145	1,493	1,432	1,559	496	1,285	1,081
Wash.....	56,966	41,676	43,896	59,824	42,051	47,184	49,949	44,138	52,745	52,651
Oregon.....	59,409	57,845	58,297	58,862	49,347	62,936	59,593	55,904	55,397	57,970
California.....	478,259	368,996	357,439	427,168	397,515	447,544	413,540	420,408	400,084	404,904
WESTERN.....	614,904	488,466	479,784	564,975	503,307	575,201	541,236	536,634	525,130	531,964
OTHER STATES.....	.....	.....	.....	.....	.....	2,103	2,383	4,866	4,846	4,604
T. U.S. PROC.....	1,030,239	864,449	904,896	909,738	800,600	1,015,042	1,023,933	927,802	940,450	898,532

*Up thru 1981 includes lima beans, snap beans, beets, cabbage/kraut, sweet corn, cucumbers for pickles, green peas, spinach, tomatoes. Beginning in 1982 includes snap beans, corn, green peas and tomatoes with cucumbers added back in 1984. (a) Included in "OTHER STATES".

ASPARAGUS—HARVESTED ACREAGE*—1,000 ACRES (Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New Jersey	1.6	1.5	1.8	n.a.	n.a.	2.0	1.9	1.9	1.8	1.7
Illinois	3.1	2.9	2.7	n.a.	n.a.	1.4	1.3	1.3	.7	.8
Michigan	19.5	19.5	19.0	n.a.	n.a.	19.2	19.2	20.5	22.0	22.5
California	26.4	27.9	27.3	n.a.	n.a.	34.2	35.2	37.8	39.7	40.1
Washington	21.0	22.2	23.7	n.a.	n.a.	29.0	29.0	30.0	31.0	32.0
Other States	9.1	9.0	7.5	n.a.	n.a.	4.1	4.9	4.7	4.6	3.8
TOT. U.S.	80.7	83.0	82.0	n.a.	n.a.	89.9	91.5	96.2	99.8	100.9

ASPARAGUS—YIELD PER ACRE*—HUNDREDWEIGHT

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
New Jersey	17	15	19	n.a.	n.a.	15	19	19	18	20
Illinois	11	13	10	n.a.	n.a.	10	11	8	14	15
Michigan	13	12	9	n.a.	n.a.	12	12	12	11	11
California	35	28	30	n.a.	n.a.	25	28	29	30	29
Washington	28	23	25	n.a.	n.a.	25	28	26	26	28
Other States	9	9	9	n.a.	n.a.	10	12	13	14	18
U.S. AVG.	24	20	21	n.a.	n.a.	21	23	23	24	24

ASPARAGUS—PRODUCTION**—1,000 TONS (Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Illinois	1.4	(a)	(a)	n.a.	n.a.	(a)	(a)	(a)	(a)	(a)
Michigan	10.1	8.2	5.9	n.a.	n.a.	9.6	9.7	9.9	10.1	10.3
California	22.2	7.5	8.8	n.a.	n.a.	5.8	8.4	5.3	6.8	(a)
Washington	26.3	23.5	26.2	n.a.	n.a.	25.4	28.5	24.5	28.4	32.2
Other States	3.6	5.2	2.9	n.a.	n.a.	1.9	2.6	2.4	2.6	4.5
Canning	39.4	34.5	35.0	n.a.	n.a.	33.5	33.8	29.3	33.2	32.9
For Freezing	24.1	9.9	9.7	n.a.	n.a.	9.2	15.4	12.8	14.7	14.1
PROCESSING ...	63.5	44.4	44.6	n.a.	n.a.	42.7	49.2	42.1	47.9	47.0
FRESH MKT ...	32.0	39.2	41.0	n.a.	n.a.	52.2	57.6	69.4	69.4	74.0
TOT. U.S.	95.5	83.6	85.6	n.a.	n.a.	94.8	106.8	111.4	117.3	121.1

ASPARAGUS—VALUE PER TON**—DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Illinois	912	(a)	(a)	n.a.	n.a.	(a)	(a)	(a)	(a)	(a)
Michigan	1,137	908	1,165	n.a.	n.a.	1,126	1,118	1,120	1,140	1,140
California	838	780	816	n.a.	n.a.	830	777	780	739	(a)
Washington	857	767	923	n.a.	n.a.	854	905	861	888	979
Other States	929	1,011	1,111	n.a.	n.a.	1,191	1,138	1,139	1,103	983
For Canning	893	816	941	n.a.	n.a.	930	951	925	944	997
For Freezing	911	852	984	n.a.	n.a.	916	909	933	904	1,057
U.S. AVG.	900	824	950	n.a.	n.a.	927	938	928	932	1,015

ASPARAGUS—TOTAL VALUE**—1,000 DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Illinois	1,231	(a)	(a)	n.a.	n.a.	(a)	(a)	(a)	(a)	(a)
Michigan	11,461	7,464	6,874	n.a.	n.a.	10,810	10,867	11,066	11,514	11,742
California	18,604	5,850	7,140	n.a.	n.a.	4,814	6,527	4,134	5,010	(a)
Washington	22,539	18,032	24,183	n.a.	n.a.	21,700	25,793	21,095	25,255	31,524
Other States	3,317	5,237	4,211	n.a.	n.a.	2,239	2,946	2,733	2,823	4,455
For Canning	35,217	28,170	32,877	n.a.	n.a.	31,120	32,156	27,133	31,284	32,816
For Freezing	21,935	8,413	9,531	n.a.	n.a.	8,443	13,977	11,895	13,318	14,905
PROCESSING ...	57,152	36,583	42,408	n.a.	n.a.	39,563	46,133	39,028	44,602	47,721

*For both fresh market and processing.

**For processing only.

(a) Included in "Other States".

n.a. - Not available.

VEGETABLE CROPS FOR PROCESSING & FRESH MARKET—Cont.

BROCCOLI—HARVESTED ACREAGE*

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<i>January-June</i>										
Arizona.....	800	400	420	550	(a)	(a)	(a)	(a)	(a)	(a)
California.....	35,500	37,100	35,400	41,800	(a)	(a)	(a)	(a)	(a)	(a)
Texas.....	450	1,700	3,300	3,200	(a)	(a)	(a)	(a)	(a)	(a)
Season Total....	36,750	39,200	39,120	45,550	(a)	(a)	(a)	(a)	(a)	(a)
<i>July-December (thru 1982)</i>										
Arizona†.....	250	350	300	250	700	1,300	1,900	2,900	4,200	4,300
California.....	32,500	35,500	36,000	40,000	82,000	95,700	97,700	106,400	107,600	104,300
Oregon.....	900	1,000	1,100	1,800	2,000	2,000	2,600	3,000	3,000	2,800
Texas†.....	500	1,800	2,000	4,400	6,800	7,500	7,300	6,800	5,400	6,200
Season Total....	34,150	38,650	39,400	46,450	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
TOT. U.S.....	70,900	77,850	78,520	92,000	91,500	106,500	109,500	119,100	120,200	117,600

BROCCOLI—YIELD PER ACRE*—HUNDREDWEIGHT

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<i>January-June</i>										
Arizona.....	60	62	69	75	(a)	(a)	(a)	(a)	(a)	(a)
California.....	89	89	100	100	(a)	(a)	(a)	(a)	(a)	(a)
Texas.....	47	55	86	88	(a)	(a)	(a)	(a)	(a)	(a)
Season Avg.	88	87	98	99	(a)	(a)	(a)	(a)	(a)	(a)
<i>July-December (thru 1982)</i>										
Arizona†.....	76	59	80	60	77	76	93	82	91	91
California.....	90	88	93	94	92	99	98	98	96	93
Oregon.....	100	99	99	110	85	88	95	100	105	91
Texas †.....	55	50	94	78	81	76	86	83	75	83
Season Avg.	90	87	93	93	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
U.S. AVG.	89	87	96	96	91	97	97	97	95	92

BROCCOLI—PRODUCTION**—1,000 TONS (Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
California.....	148.0	142.9	144.6	159.6	126.3	164.7	158.0	138.0	125.0	102.0
Other States†....	4.3	5.1	5.6	10.6	10.9	12.4	15.7	16.4	16.0	15.3
PROCESSING ...	152.3	147.9	150.2	170.2	137.2	177.1	173.7	154.4	141.0	117.3
FRESH MKT.....	162.8	189.8	225.9	270.7	279.1	337.0	357.7	422.1	430.6	425.8
TOT. U.S.....	315.1	337.7	376.1	441.0	416.3	514.1	531.4	576.5	571.6	543.0

BROCCOLI—VALUE PER TON**—DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
California.....	320.00	376.00	378.00	394.00	390.00	394.00	388.00	362.00	360.00	381.00
Other States†....	295.00	312.00	324.00	336.00	327.00	325.00	319.00	313.00	326.00	319.00
U.S. PROC. AV. ...	319.00	374.00	376.00	390.00	385.00	389.00	382.00	357.00	356.00	373.00

BROCCOLI—TOTAL VALUE**—1,000 DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
California.....	47,360	53,712	54,659	62,882	49,257	64,892	61,304	49,956	45,000	38,862
Other States†....	1,267	1,574	1,828	3,567	3,567	4,024	4,988	5,118	5,227	4,876
U.S. PROC.	48,627	55,286	56,487	66,449	52,824	68,916	66,292	55,074	50,227	43,738

*For fresh market and processing. **For processing only. (a) Included in "July-December".
† Data prior to 1984 not comparable to later years because of change from calendar to seasonal forecasts.
n.a. - Not available.

CARROTS—HARVESTED ACREAGE*—1,000 ACRES (Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<i>Winter</i>	(a)	(a)	(a)	(a)	(b)	(b)	(b)	(b)	(b)	(b)
Arizona	(a)	(a)	(a)	(a)	(b)	(b)	(b)	(b)	(b)	(b)
Calif. Des.	(a)	(a)	(a)	(a)	(b)	(b)	(b)	(b)	(b)	(b)
Calif. Other....	(a)	(a)	(a)	(a)	(b)	(b)	(b)	(b)	(b)	(b)
Texas	(a)	(a)	(a)	(a)	(b)	(b)	(b)	(b)	(b)	(b)
<i>Spring</i>	34.1	32.6	32.3	34.6	(b)	(b)	(b)	(b)	(b)	(b)
Arizona	1.9	1.8	1.6	2.6	(b)	(b)	(b)	(b)	(b)	(b)
Calif. Des.	10.2	11.1	8.6	8.9	(b)	(b)	(b)	(b)	(b)	(b)
Calif. Other....	10.3	10.6	10.4	11.5	(b)	(b)	(b)	(b)	(b)	(b)
Texas	11.7	9.1	11.7	11.6	(b)	(b)	(b)	(b)	(b)	(b)
<i>Summer</i>	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Calif. Other....	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Colorado	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Illinois	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Michigan	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Texas	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Washington....	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Wisconsin	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
<i>Fall (thru 1982)</i> ...	44.1	39.9	41.6	44.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Arizona †, ‡ ..	.....	.....	.....	.....	3.1	2.9	2.4	2.4	2.0	1.9
Calif. Des. †, ‡	1.0	.6	.5	.6	11.9	11.0	11.8	11.1	14.0	15.3
Calif. Other....	15.5	14.3	14.4	14.9	27.5	30.1	28.1	28.9	29.0	30.7
Colorado	1.0	1.1	1.1	1.0	1.1	1.0	1.0	1.2	1.3	1.4
Florida .....	.....	.....	.....	.....	10.0	10.6	11.5	12.3	12.1	12.2
Illinois	.3	.3	.....	.....	.....	.....	.....	.....	.....	.....
Michigan	6.6	5.6	5.6	6.7	7.2	7.5	6.4	3.7	7.0	6.7
Minnesota	1.7	1.3	1.3	1.5	1.3	1.3	1.2	1.2	1.5	1.4
New York	1.1	1.0	1.1	1.6	1.6	1.6	1.4	1.4	1.2	1.2
Oregon	1.4	1.5	2.0	2.3	1.3	1.2	1.1	1.0	.8	.8
Texas †, ‡	4.4	4.5	4.8	5.5	13.1	15.0	13.8	11.6	11.5	10.0
Washington....	5.0	4.2	4.4	4.8	4.0	4.3	5.2	5.8	6.6	5.6
Wisconsin	4.5	3.8	4.5	4.0	3.2	5.2	3.3	3.5	3.5	3.2
Other States...	1.6	1.8	1.9	1.9	2.1	1.9	2.9	2.0	2.6	1.9
TOT. U.S.	78.2	72.5	73.9	79.4	87.4	93.6	90.1	86.1	93.1	92.3

CARROTS—YIELD PER ACRE*—HUNDREDWEIGHT

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<i>Winter</i>	(a)	(a)	(a)	(a)	(b)	(b)	(b)	(b)	(b)	(b)
Arizona	(a)	(a)	(a)	(a)	(b)	(b)	(b)	(b)	(b)	(b)
Calif. Des.	(a)	(a)	(a)	(a)	(b)	(b)	(b)	(b)	(b)	(b)
Calif. Other....	(a)	(a)	(a)	(a)	(b)	(b)	(b)	(b)	(b)	(b)
Texas	(a)	(a)	(a)	(a)	(b)	(b)	(b)	(b)	(b)	(b)
<i>Spring</i>	213	228	234	258	(b)	(b)	(b)	(b)	(b)	(b)
Arizona	120	140	135	170	(b)	(b)	(b)	(b)	(b)	(b)
Calif. Des.	231	224	280	320	(b)	(b)	(b)	(b)	(b)	(b)
Calif. Other....	307	314	300	335	(b)	(b)	(b)	(b)	(b)	(b)
Texas	129	151	155	155	(b)	(b)	(b)	(b)	(b)	(b)
<i>Summer</i>	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Calif. Other....	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Colorado	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Illinois	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Michigan	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Texas	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Washington....	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Wisconsin	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
<i>Fall</i>	312	303	311	324	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Arizona †, ‡ ..	.....	.....	.....	.....	175	130	165	165	200	125
Calif. Des. †, ‡	210	190	205	210	250	280	250	260	215	200
Calif. Other....	294	311	285	310	310	295	285	335	330	340
Colorado	245	240	350	350	225	280	350	340	345	360
Florida .....	.....	.....	.....	.....	110	69	92	69	88	97
Illinois	310	255	.....	.....	.....	.....	.....	.....	.....	.....
Michigan	260	239	235	255	230	270	260	250	275	255
Minnesota	380	380	320	370	340	330	380	400	360	175
New York	290	365	355	330	325	355	385	400	360	350
Oregon	440	465	445	435	415	430	480	460	475	485
Texas †, ‡	152	151	195	165	210	145	145	175	190	180
Washington....	447	467	400	435	400	425	435	415	460	520
Wisconsin	417	296	420	450	465	365	470	435	500	370
Other States...	404	349	394	543	362	462	397	414	304	262
U.S. AVG.	269	270	277	295	265	253	254	272	274	266

*For both fresh market & processing. (a) Included with "Spring". (b) Included with "Fall".
†, ‡ Data prior to 1984 not comparable to later years because of change from calendar to seasonal forecasts.
n.a. - Not available.

CARROTS—PRODUCTION**—1,000 TONS (Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Michigan	29.2	23.0	24.3	30.9	26.1	30.0	27.7	21.6	38.8	33.2
Minnesota	17.7	12.3	10.8	13.7	13.7	13.9	15.0	15.9	14.8	7.0
New York	12.1	10.3	11.3	15.3	15.3	19.5	12.5	14.0	14.2	15.0
Wisconsin	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
NORTHERN	58.9	45.6	46.4	59.9	55.2	63.4	55.2	51.5	67.7	55.2
California†	156.2	120.6	75.0	83.0	120.4	105.5	75.4	89.9	58.0	60.0
Oregon	27.6	27.1	36.8	41.0	21.6	21.5	21.6	15.5	12.8	13.2
Texas†	19.1	18.8	23.2	28.8	33.6	24.8	9.0	14.0	10.5	11.2
Washington	90.0	67.1	63.0	87.3	60.6	68.8	90.4	96.3	116.7	111.7
WESTERN	292.8	233.5	198.0	240.0	236.2	220.6	196.4	215.7	197.9	196.2
OTHER STATES	117.2	80.1	121.6	119.9	103.8	128.9	126.9	106.8	116.4	78.8
PROCESSING ...	469.0	359.2	366.0	419.8	395.2	412.9	378.6	374.0	382.0	330.3
FRESH MKT. ...	581.8	617.8	657.3	751.2	761.7	773.8	767.4	797.7	895.0	898.6
TOT. U.S.	1,050.7	976.9	1,023.3	1,171.0	1,156.9	1,186.7	1,145.9	1,171.7	1,277.0	1,228.9

CARROTS—VALUE PER TON**—DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Michigan	44.50	58.00	49.50	52.50	48.40	51.70	57.60	57.30	56.80	65.40
Minnesota	44.00	54.30	47.80	55.00	61.90	48.10	55.50	66.30	50.20	73.00
New York	50.00	59.30	62.90	62.10	68.10	64.50	63.70	65.00	59.80	61.00
Wisconsin	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
California†	49.60	55.60	58.60	64.60	69.40	74.90	81.80	81.00	89.10	83.50
Oregon	39.40	44.30	44.50	41.80	43.40	43.40	42.00	46.90	49.90	51.60
Texas†	36.40	42.00	42.60	22.00	22.00	22.00	24.00	22.00	22.00	23.00
Washington	29.30	34.40	39.40	36.20	40.10	50.40	53.40	42.00	39.90	53.90
Other States	60.10	68.00	68.00	67.50	68.20	71.50	69.20	69.10	65.00	68.20
U.S. PROC. AV. .	46.70	53.00	55.20	53.10	57.40	61.90	63.70	61.30	57.70	63.40

CARROTS—TOTAL VALUE**—1,000 DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Michigan	1,299	1,333	1,203	1,620	1,265	1,551	1,596	1,235	2,202	2,175
Minnesota	777	668	516	753	850	670	834	1,056	740	511
New York	604	611	711	953	1,043	1,258	796	910	849	915
Wisconsin	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
NORTHERN	2,680	2,612	2,430	3,326	3,158	3,479	3,226	3,201	3,791	3,601
California†	7,745	6,705	4,395	5,359	8,356	7,902	6,168	7,282	5,169	5,010
Oregon	1,086	1,198	1,639	1,712	937	933	909	726	636	682
Texas†	695	789	986	634	726	546	216	308	231	259
Washington	2,637	2,308	2,481	3,161	2,430	3,466	4,827	4,045	4,655	6,022
WESTERN	12,163	11,000	9,501	10,866	12,449	12,847	12,120	12,361	10,691	11,973
OTHER STATES	7,041	5,440	8,272	8,088	7,080	9,221	8,786	7,381	7,565	5,378
U.S. PROC.	21,884	19,052	20,203	22,280	22,687	25,547	24,132	22,943	22,047	20,952

**For Processing Only. (a) Included in "OTHER STATES".
later years due to change from calendar to seasonal forecasts.

† Data prior to 1984 not comparable with

CAULIFLOWER—HARVESTED ACREAGE*—1,000 ACRES (Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Winter (c)	15.0	14.1	14.9	16.3	(b)	(b)	(b)	(b)	(b)	(b)
Arizona	1.8	1.6	1.7	1.5	(b)	(b)	(b)	(b)	(b)	(b)
California	12.8	11.8	12.8	14.1	(b)	(b)	(b)	(b)	(b)	(b)
Texas	.4	.7	.4	.7	(b)	(b)	(b)	(b)	(b)	(b)
Spring (c)	(c)	(c)	(c)	(c)	(b)	(b)	(b)	(b)	(b)	(b)
California	(c)	(c)	(c)	(c)	(b)	(b)	(b)	(b)	(b)	(b)
Summer (b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
California	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Michigan	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
New York	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Washington										
Fall (b)	27.8	29.2	31.3	35.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Arizona (d)	.4	.6	.5	.7	2.9	4.0	4.9	6.1	6.4	6.1
California	20.9	22.1	23.5	25.9	41.9	46.2	45.6	53.0	51.1	48.9
Michigan	1.1	1.0	1.2	1.5	1.4	1.5	1.5	.7	1.2	1.1
New York-LI	1.5	1.5	1.9	1.9	1.8	2.0	2.0	1.6	1.6	1.5
N.Y.-Upstate	1.5	1.7	1.7	1.8	1.7	1.9	1.9	1.5	1.5	1.6
Oregon	2.1	2.0	2.0	2.9	3.1	3.4	3.8	3.9	3.6	3.4
Texas	.3	.3	.5	.4	1.8	1.8	1.5	1.0	.7	1.5
TOT. U.S.	42.8	43.3	46.2	51.4	54.6	60.8	61.2	67.8	66.1	64.1

CAULIFLOWER—YIELD PER ACRE*—HUNDREDWEIGHT

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Winter (c)	88	95	115	96	(b)	(b)	(b)	(b)	(b)	(b)
Arizona	89	110	120	135	(b)	(b)	(b)	(b)	(b)	(b)
California	90	94	115	93	(b)	(b)	(b)	(b)	(b)	(b)
Texas	18	78	76	77	(b)	(b)	(b)	(b)	(b)	(b)
Spring (c)	(c)	(c)	(c)	(c)	(b)	(b)	(b)	(b)	(b)	(b)
California	(c)	(c)	(c)	(c)	(b)	(b)	(b)	(b)	(b)	(b)
Summer (b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
California	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Michigan	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
New York	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Washington	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Fall (b)	101	100	113	108	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Arizona (d)	83	105	160	115	120	115	115	115	125	105
California	97	93	105	99	95	105	105	110	110	105
Michigan	70	50	62	58	55	65	65	55	60	55
New York-LI	90	104	135	125	120	130	110	120	100	120
N.Y.-Upstate	102	100	120	120	105	110	120	110	105	95
Oregon	170	195	195	200	150	195	170	130	140	150
Texas	40	85	80	90	91	82	80	92	85	70
U.S. AVG.	96	98	113	104	99	110	109	111	112	106

CAULIFLOWER—PRODUCTION**—1,000 TONS (Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
California	59.8	55.0	69.6	71.0	60.9	59.1	55.0	58.0	48.0	31.0
Michigan	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
New York	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Other States	14.7	17.7	17.0	26.5	24.6	34.5	32.9	23.1	24.3	24.3
PROCESSING ...	74.5	72.7	86.6	97.5	85.5	98.6	87.9	81.1	72.3	55.3
FRESH MKT. ...	131.4	140.1	174.5	171.0	185.2	240.9	245.2	295.3	296.4	284.0
TOT. U.S.	205.9	212.8	261.1	268.5	270.7	334.5	333.1	376.4	368.7	339.2

CAULIFLOWER—VALUE PER TON**—DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
California	214.00	248.00	254.00	275.00	270.00	292.00	294.00	295.00	308.00	314.00
Michigan	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
New York	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Other States	148.00	174.00	193.00	192.00	207.00	222.00	213.00	205.00	207.00	212.00
U.S. PROC. AV. .	201.00	230.00	242.00	252.00	252.00	266.00	264.00	270.00	274.00	269.00

*For fresh market and processing. **For processing only. (a) Included in Other States.
 (b) Combined with Fall. (c) Combined with Winter. (d) Data prior to 1984 not comparable with later years
 due to change from calendar to seasonal forecasting. n.a. - Not available.

VEGETABLE CROPS FOR PROCESSING & FRESH MARKET—Cont.

CAULIFLOWER—TOTAL VALUE**—1,000 DOLLARS

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
California	12,797	13,640	17,678	19,525	16,443	17,243	16,170	17,110	14,784	9,734
Michigan	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
New York	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Other States	2,187	3,079	3,271	5,091	5,082	7,657	7,008	4,733	5,043	5,140
TOT U.S. PEOC .	14,984	16,719	20,949	24,616	21,525	24,900	23,178	21,843	19,827	14,874

**For processing only. (a) Included in Other States.

*SWEET POTATOES—HARVESTED ACREAGE—1,000 ACRES

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Maryland	1.4	1.3	1.3	1.3	1.1	1.1	1.1	.9	.8	.9
New Jersey	2.7	2.4	2.5	2.9	2.4	2.4	2.7	2.0	2.0	2.0
Virginia	3.9	2.1	2.3	2.2	1.2	.6	1.1	.9	.9	.9
MID ATL	8.0	5.8	6.1	6.4	4.7	4.1	4.9	3.8	3.7	3.8
N. Carolina	40.0	37.0	39.0	44.0	37.0	38.0	40.0	34.0	35.0	34.0
S. Carolina	3.1	2.5	3.5	5.3	4.0	5.0	5.0	4.0	4.5	4.0
Georgia	5.5	4.5	5.6	6.3	5.8	6.4	6.3	5.8	5.2	5.2
LOWER ATL	48.6	44.0	48.1	55.6	46.8	49.4	51.3	43.8	44.7	43.2
Alabama	5.7	5.3	5.4	5.5	4.9	5.9	6.4	6.3	6.7	6.8
Arkansas	.7	.6	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana	27.0	25.0	26.0	25.0	24.0	23.0	21.0	20.0	19.0	17.0
Mississippi	4.7	4.6	5.2	5.0	4.7	4.8	5.5	5.2	4.5	3.5
Tennessee	2.0	2.0	1.8	1.5	1.4	1.0	1.1	.9	.8	.8
Texas	7.9	6.5	7.8	7.2	7.1	7.3	7.7	6.6	7.3	7.1
S. CENTRAL	48.0	44.0	46.2	44.2	42.1	42.0	41.7	39.0	38.3	35.2
California	9.6	8.4	8.9	9.2	8.8	8.0	7.4	6.8	6.6	6.9
U.S.†	114.2	102.2	109.3	115.4	102.4	103.5	105.3	93.4	93.3	89.1

*All uses.

*SWEET POTATOES—YIELD PER ACRE—CWT

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Maryland	155	150	175	195	165	160	165	130	140	150
New Jersey	115	115	110	110	90	110	125	110	120	100
Virginia	130	115	150	150	115	140	130	110	115	125
N. Carolina	120	115	120	135	120	135	150	150	130	135
S. Carolina	110	95	95	125	115	100	125	105	90	90
Georgia	115	100	115	130	125	140	160	130	150	150
Alabama	110	100	115	120	105	115	120	110	110	115
Arkansas	75	60	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana	95	85	100	100	95	105	120	125	130	145
Mississippi	95	90	95	100	95	105	120	100	110	110
Tennessee	105	80	80	85	80	95	150	110	110	90
Texas	130	80	95	135	120	110	130	120	100	90
California	170	180	185	190	195	180	195	200	205	190
U.S. AVG.	117	107	117	129	118	125	141	136	129	133

*All uses.

SWEET POTATOES—PRODUCTION—1,000 CWT

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Maryland	217	195	228	254	182	176	182	117	112	135
New Jersey	311	276	275	319	216	264	338	220	240	200
Virginia	507	242	345	330	138	84	143	99	104	113
MID ATL	1,035	713	848	903	536	524	663	436	456	448
N. Carolina	4,800	4,255	4,680	5,940	4,440	5,130	6,000	5,100	4,550	4,590
S. Carolina	341	238	333	663	460	500	625	420	405	360
Georgia	633	450	644	819	725	896	1,008	754	780	780
LOWER ATL	5,774	4,943	5,657	7,422	5,625	6,526	7,633	6,274	5,735	5,730
Alabama	627	530	621	660	515	679	768	693	737	782
Arkansas	53	36								
Louisiana	2,565	2,125	2,600	2,500	2,280	2,415	2,520	2,500	2,470	2,465
Mississippi	447	414	494	500	447	504	660	520	495	385
Tennessee	210	160	144	128	112	95	165	99	88	72
Texas	1,027	520	741	972	852	803	1,001	792	730	639
S. CENTRAL	4,929	3,785	4,600	4,760	4,206	4,496	5,114	4,604	4,520	4,343
California	1,632	1,512	1,647	1,748	1,716	1,440	1,443	1,360	1,353	1,311
U.S.†	13,370	10,953	12,752	14,833	12,083	12,986	14,853	12,674	12,064	11,832

MUSHROOMS—PRODUCTION, SALES, USE, VALUE

Source: Statistical Reporting Service U.S.D.A

Crop year beginning July 1 of year shown

	1979	1980	1981	1982	1983	1984	1985	1986	1987	*1988
Production Area—1,000 sq. ft.										
California	(a)	23,976	23,846	23,777	25,301	25,169	22,574	21,575	21,815	22,327
Pennsylvania	72,984	72,033	75,360	68,620	74,289	68,524	60,210	61,759	60,462	58,795
Other States	77,774	44,337	42,120	42,998	43,220	45,440	46,781	46,326	51,369	56,765
Total U.S.	150,758	140,346	141,326	135,395	142,810	139,133	129,565	129,660	133,646	137,887
Production—1,000 lbs.										
California	(a)	83,433	87,543	89,414	108,475	113,600	106,910	110,997	112,580	n.a.
Pennsylvania	213,709	237,463	273,048	246,582	279,654	275,196	256,160	281,376	284,783	n.a.
Other States	256,360	148,880	156,555	154,830	173,402	206,885	224,886	222,020†	234,327	n.a.
Total U.S.	470,069	469,576	517,146	490,826	561,531	595,681	587,956	614,393	631,690	n.a.
Price Per Pound—Cents										
California	(a)	96.6	102.0	111.0	98.6	100.0	97.7	110.0	97.9	n.a.
Pennsylvania	66.3	67.4	65.8	70.0	73.4	67.5	66.6	69.1	72.0	n.a.
Other States	88.6	90.0	96.0	102.9	100.4	93.6	96.9	96.9	97.7	n.a.
Value of Production—\$1,000										
California	(a)	80,600	88,907	99,415	105,967	114,143	104,444	122,064	110,189	n.a.
Pennsylvania	141,601	160,019	179,557	172,607	205,196	185,801	170,705	194,465	205,100	n.a.
Other States	226,996	133,880	150,242	159,399	174,225	193,704	217,944	215,129	228,892	n.a.
Total U.S.	368,597	374,499	418,706	431,421	486,388	493,648	493,093	531,658	544,181	n.a.
Sales to Processors—1,000 lbs.										
Pennsylvania	143,660	149,602	152,907	117,251	124,979	115,529	99,981	98,222	99,674	n.a.
Other East		13,864	9,898	10,503	11,240	15,787	16,938	14,623	15,541	n.a.
Central	70,563	24,316	26,223	16,945	18,444	23,755	26,740	27,780	27,036	n.a.
West		6,742	8,986	8,893	18,793	20,697	17,093	16,469	20,663	n.a.
Total	214,223	194,524	198,014	153,592	173,456	175,768	160,752	157,094	162,914	n.a.
Price Per lb. to Proc.—Cents										
Pennsylvania	57.3	58.1	55.2	59.3	62.7	55.1	52.8	52.7	58.5	n.a.
Other East		55.1	48.1	55.0	61.7	47.9	49.0	49.7	57.4	n.a.
Central	58.3	61.4	59.7	72.3	73.4	65.7	61.9	69.3	71.2	n.a.
West		68.0	56.7	65.5	70.4	67.9	61.7	62.7	62.2	n.a.
U.S.	57.6	58.6	55.5	60.8	64.6	57.4	54.9	56.4	61.0	n.a.
Value of Proc. Sales—\$1,000										
Pennsylvania	82,249	86,919	84,405	69,530	78,362	63,656	52,790	51,763	58,309	n.a.
Other East		7,635	4,761	5,773	6,931	7,559	8,296	7,272	8,915	n.a.
Central	41,147	14,923	15,643	12,244	13,544	15,612	16,540	19,260	19,258	n.a.
West		4,583	5,092	5,826	13,224	14,059	10,553	10,326	12,845	n.a.
Total	123,396	114,060	109,901	93,373	112,061	100,886	88,179	88,621	99,327	n.a.
Sales to Fresh Market—1,000 lbs.										
Pennsylvania	70,049	87,861	120,141	129,331	154,675	159,667	156,179	183,154	185,109	n.a.
Other East		42,016	47,763	44,515	51,530	63,198	65,606	64,857	68,367	n.a.
Central	185,797	34,639	34,367	40,857	44,839	44,046	48,988	46,412	49,390	n.a.
West		110,536	116,861	122,531	137,031	153,002	156,431	162,876	165,910	n.a.
Total	255,846	275,052	319,132	337,234	388,075	419,913	427,204	457,299	468,776	n.a.

See footnotes on next page.

MUSHROOMS—PRODUCTION, SALES, USE, VALUE—Continued

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Price Per Lb. to Fresh Market—Cents										
Pennsylvania	84.7	83.2	79.2	79.7	82.0	76.5	75.5	77.9	79.3	n.a.
Other East		101.0	100.0	112.0	106.0	94.1	108.0	103.0	104.0	n.a.
Central	100.1	95.3	97.3	103.0	103.0	103.0	107.0	109.0	111.0	n.a.
West		101.0	113.0	117.0	107.0	108.0	105.0	112.0	104.0	n.a.
U.S.	95.8	94.7	96.8	100.0	96.5	93.5	94.8	96.9	94.9	n.a.
Value of Fresh Market Sales—\$1,000										
Pennsylvania	59,352	73,100	95,152	103,077	126,834	122,145	117,915	142,702	146,791	n.a.
Other East		42,336	47,922	49,669	54,456	59,460	70,943	66,737	71,174	n.a.
Central	185,849	33,003	33,445	41,951	46,108	45,551	52,333	50,650	54,890	n.a.
West		112,000	132,286	143,351	146,929	165,606	163,723	182,948	171,999	n.a.
Total	245,201	260,439	308,805	338,048	374,327	392,762	404,914	443,037	444,854	n.a.

¹ Production, Price Per Pound & Value of Production estimates are primarily *Agaricus bisporus*, but also include exotic and specialty mushrooms through 1986. Area in Production estimates are only *Agaricus bisporus* beginning in 1986. [†] Includes 13,108,000 lb. in Ind., 23,359,000 lb. in Mich. & 11,065,000 lb. in Ohio. (a) Included in Other States. n.a. - Not available. * Filling intentions - represents area intended for use during 1988/89 season.

FRUIT CROPS—UTILIZATION, PRICE, VALUE

Source: Crop Reporting Board, Statistical Reporting Service, U.S.D.A.

APPLES—UTILIZED PRODUCTION, PRICE, VALUE

State	Utilized production			Price per pound			Value of utilized prod.		
	1986	1987	1988	1986	1987	1988	1986	1987	1988
	Million pounds			Cents			1,000 Dollars		
Arkansas	9.5	4.0	10.0	13.3	11.9	16.8	1,263	474	1,680
California	515.0	650.0	550.0	16.3	11.1	15.6	83,903	72,020	85,800
Colorado	17.6	118.0	70.0	9.7	6.7	11.1	1,706	7,948	7,770
Connecticut	46.0	44.0	47.0	19.3	20.9	24.2	8,869	9,195	11,374
Delaware	27.0	26.0	25.0	9.1	10.6	15.9	2,456	2,768	3,975
Georgia	29.0	40.0	34.0	16.0	11.3	12.8	4,646	4,520	4,352
Idaho	94.0	150.0	135.0	22.2	10.6	19.0	20,900	15,964	25,650
Illinois	90.0	96.0	82.0	16.0	11.9	15.5	14,360	11,460	12,710
Indiana	37.0	70.0	51.0	18.6	17.0	20.0	6,864	11,920	10,200
Iowa	5.4	9.3	8.0	26.8	20.3	21.5	1,449	1,886	1,720
Kansas	2.9	10.4	9.0	23.9	14.7	16.6	693	1,532	1,494
Kentucky	3.9	16.5	9.5	20.8	15.3	15.8	810	2,523	1,501
Maine	86.0	74.0	90.0	19.2	19.1	21.2	16,505	14,155	19,080
Maryland	85.0	38.0	44.0	11.3	10.3	15.8	9,641	3,930	6,952
Massachusetts	92.0	94.0	98.0	19.6	20.6	23.1	18,048	19,319	22,638
Michigan	700.0	1,050.0	800.0	9.3	7.6	10.0	65,075	79,860	80,000
Minnesota	18.0	23.0	13.0	30.5	23.0	28.9	5,484	5,299	3,757
Missouri	37.0	50.0	54.0	20.5	9.9	15.2	7,597	4,935	8,208
New Hampshire	50.0	49.0	57.0	20.0	22.4	24.4	9,982	10,955	13,908
New Jersey	100.0	77.0	55.0	12.4	12.4	7.7	12,416	9,520	4,235
New Mexico	6.0	12.6	11.0	19.0	15.6	23.3	1,140	1,966	2,563
New York	900.0	880.0	870.0	10.1	9.2	9.9	91,260	80,560	86,130
North Carolina	120.0	390.0	375.0	8.5	6.4	7.3	10,166	25,110	27,375
Ohio	90.0	150.0	95.0	17.4	15.8	16.1	15,660	23,728	15,295
Oregon	105.0	205.0	185.0	10.6	5.4	15.3	11,081	11,145	25,245
Pennsylvania	620.0	460.0	500.0	8.3	9.0	9.7	51,252	41,201	48,500
Rhode Island	5.5	5.0	5.5	22.3	23.3	26.2	1,224	1,165	1,441
South Carolina	30.0	39.0	38.0	13.5	8.4	12.2	4,037	3,291	4,636
Tennessee	8.5	14.0	11.0	18.5	13.4	15.7	1,572	1,880	1,727
Utah	34.0	63.0	37.0	13.8	7.4	11.5	4,690	4,635	4,255
Vermont	48.0	42.0	43.0	17.7	18.0	20.3	8,480	7,576	8,729
Virginia	450.0	461.0	462.0	9.7	9.3	10.1	43,456	42,830	46,662
Washington	3,160.0	4,800.0	3,700.0	15.5	7.3	15.9	488,400	348,000	588,300
West Virginia	230.0	180.0	215.0	10.6	7.5	10.3	24,410	13,567	22,145
Wisconsin	55.0	61.0	42.0	17.1	15.5	21.5	9,390	9,466	9,030
United States	7,907.3	10,451.8	8,811.0	13.4	8.7	13.8	1,058,879	906,353	1,219,037

APPLES—UTILIZATION, PRICE—SELECTED STATES

	UTILIZATION (million pounds)				PRICE (dollars per ton)			
	1984	1985	1986	1987	1984	1985	1986	1987
California								
Canned	80.0	100.0	49.0	80.0	148.00	135.00	142.00	123.00
Juice/cider	220.0	280.0	216.0	292.0	109.00	76.00	105.00	72.00
Frozen	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dried	35.0	80.0	33.0	48.0	133.00	128.00	140.00	121.00
Other	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Proc.	335.0	460.0	298.0	420.0	121.00	98.00	115.00	87.30
Fresh	185.0	160.0	217.0	230.0	514.00	450.00	614.00	466.00
Michigan								
Canned	138.0	185.0	140.0	195.0	138.00	129.00	138.00	133.00
Juice/cider	253.0	340.0	210.0	330.0	92.00	72.00	104.00	84.00
Frozen	85.0	108.0	110.0	125.0	166.00	142.00	168.00	150.00
Dried	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other	4.0	2.0	15.0	10.0	110.00	94.00	110.00	82.00
Total Proc.	480.0	635.0	475.0	660.0	118.00	101.00	129.00	111.00
Fresh	290.0	435.0	225.0	390.0	232.00	218.00	304.00	220.00
New York								
Canned	213.0	280.0	275.0	265.0	132.00	110.00	130.00	126.00
Juice/cider	310.0	359.0	230.0	170.0	84.00	66.00	102.00	90.00
Frozen	56.0	26.0	n.a.	40.0	126.00	126.00	n.a.	128.00
Dried	26.0	16.0	n.a.	n.a.	124.00	114.00	n.a.	n.a.
Other	14.0	19.0	8.0	25.0	146.00	128.00	134.00	130.00
Total Proc.	619.0	700.0	540.0	500.0	107.00	89.00	118.00	114.00
Fresh	401.0	379.0	360.0	380.0	402.00	230.00	330.00	274.00
Pennsylvania								
Canned	228.2	234.1	319.4	181.2	138.00	135.00	124.00	117.00
Juice/cider	132.2	136.1	155.0	116.0	96.00	74.00	90.00	78.00
Frozen	3.9	2.0	4.8	3.5	160.00	152.00	138.00	132.00
Dried	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other	3.7	2.8	4.8	2.3	96.00	68.00	88.00	94.00
Total Proc.	368.0	375.0	484.0	303.0	122.00	112.00	113.00	102.00
Fresh	207.0	210.0	136.0	157.0	294.00	322.00	348.00	328.00
Virginia								
Canned	163.0	146.5	120.0	155.0	130.00	164.00	138.00	135.00
Juice/cider	94.0	66.5	80.0	73.0	88.00	76.00	100.00	86.00
Frozen	n.a.	n.a.	n.a.	21.0	n.a.	n.a.	n.a.	128.00
Dried	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other	12.0	10.0	n.a.	7.0	92.00	100.00	n.a.	74.00
Total Proc.	292.0	252.0	268.0	256.0	116.00	135.00	126.00	119.00
Fresh	173.0	136.0	182.0	205.0	326.00	310.00	292.00	268.00
Washington								
Canned	92.0	80.0	100.0	150.0	117.00	129.00	126.00	73.80
Juice/cider	432.0	236.0	430.0	1,400.0	70.00	78.00	77.00	32.80
Frozen	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dried	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other	46.0	16.0	30.0	n.a.	154.00	141.00	137.00	n.a.
Total Proc.	778.0	460.0	720.0	1,800.0	96.00	105.00	95.60	39.80
Fresh	2,172.0	1,590.0	2,440.0	3,000.0	266.00	408.00	372.00	208.00
West Virginia								
Canned	89.4	58.6	75.3	75.5	182.00	140.00	144.00	125.00
Juice/cider	36.7	58.2	32.7	34.3	88.00	74.00	114.00	92.00
Frozen	13.0	13.2	34.2	15.4	150.00	144.00	138.00	126.00
Dried	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other	1.0	.5	.1	1.8	108.00	92.00	132.00	94.00
Total Proc.	140.1	130.5	142.3	127.0	154.00	111.00	136.00	116.00
Fresh	84.9	99.5	97.7	53.0	306.00	306.00	336.00	234.00
United States								
Canned	1,176.7	1,255.4	1,179.0	1,289.6	137.00	132.00	132.00	118.00
Juice/cider	1,886.3	1,842.1	1,648.9	2,924.8	88.00	75.00	96.50	57.90
Frozen	198.1	194.3	257.3	248.8	151.00	139.00	150.00	132.00
Dried	288.6	242.4	199.4	283.8	123.00	132.00	123.00	67.70
Other	102.3	73.9	90.9	73.2	133.00	117.00	125.00	100.00
Total Proc.	3,652.0	3,608.1	3,375.5	4,820.2	111.00	103.00	116.00	79.30
Fresh	4,666.1	4,227.7	4,531.8	5,631.6	310.00	346.00	382.00	254.00

SWEET CHERRIES—UTILIZED* PRODUCTION, PRICE, VALUE

	1980	1981	1982	1983	1984	1985	1986	1987	1988
CALIFORNIA									
Fresh..... tons.....	30,400	24,000	9,700	12,900	27,600	19,350	6,600	34,000	19,500
Canned..... do.....	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Brined..... do.....	13,600	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Used..... do.....	44,000	32,750	12,300	16,800	37,200	23,500	8,400	45,000	26,000
Price Per Ton-Fresh.....	\$720	\$801	\$1,536	\$973	\$804	\$1,160	\$1,390	\$686	\$874
Price Per Ton-Proc.....	\$424	\$492	\$707	\$555	\$352	\$529	\$576	\$481	\$461
Price Per Ton-All.....	\$629	\$718	\$1,361	\$876	\$687	\$1,049	\$1,226	\$636	\$771
Value..... \$1,000	27,676	23,529	16,737	14,717	25,569	24,641	10,211	28,615	20,040
IDAHO									
Total Used..... tons.....	3,100	1,900	2,060	1,650	2,400	2,100	2,300	1,700	2,200
Value..... \$1,000	2,099	1,363	1,311	961	1,105	2,065	1,971	1,259	2,040
MICHIGAN									
Fresh..... tons.....	2,000	1,500	2,000	2,000	3,000	3,000	4,000	6,000	5,500
Canned..... do.....	8,500	5,500	3,300	3,700	5,300	4,600	2,000	4,300	2,450
Brined..... do.....	17,100	12,000	15,900	9,000	17,600	19,200	10,000	16,800	16,950
Total Used..... do.....	29,000	23,000	25,500	18,000	31,000	31,000	20,000	32,000	28,000
Price Per Ton-Fresh.....	\$1,200	\$582	\$850	\$792	\$892	\$752	\$800	\$906	\$1,250
Price Per Ton-Proc.....	\$291	\$361	\$360	\$418	\$373	\$473	\$520	\$500	\$512
Price Per Ton-All.....	\$354	\$375	\$398	\$460	\$423	\$500	\$576	\$576	\$657
Value..... \$1,000	10,266	8,635	10,160	8,272	13,120	15,500	11,520	18,436	18,395
MONTANA									
Total Used..... tons.....	700	1,240	3,100	1,365	1,400	3,500	1,000	2,600	1,900
Value..... \$1,000	435	882	1,934	624	932	2,255	480	2,280	1,042
NEW YORK									
Total Used..... tons.....	4,600	1,050	3,200	3,000	2,200	1,500	1,400	1,250	1,270
Value..... \$1,000	2,070	653	1,946	1,706	1,248	1,005	1,188	1,049	1,210
OREGON									
Fresh..... tons.....	7,400	6,600	11,500	9,500	10,000	4,000	8,500	13,000	16,000
Canned..... do.....	3,700	3,100	4,900	4,700	2,300	3,700	2,900	4,100	8,600
Brined..... do.....	18,850	24,800	17,800	21,800	14,800	17,800	24,300	33,000	31,000
Total Used..... do.....	31,800	37,000	35,000	42,000	29,500	27,000	38,000	54,000	60,000
Price Per Ton-Fresh.....	\$610	\$732	\$890	\$604	\$548	\$861	\$860	\$995	\$830
Price Per Ton-Proc.....	\$466	\$503	\$483	\$451	\$462	\$579	\$606	\$593	\$579
Price Per Ton-All.....	\$500	\$544	\$617	\$486	\$491	\$621	\$663	\$690	\$646
Value..... \$1,000	15,900	20,122	21,586	20,396	14,489	16,761	25,187	37,248	38,756
PENNSYLVANIA									
Total Used..... tons.....	700	300	580	750	900	500	1,000	500	1,200
Value..... \$1,000	763	344	796	1,095	1,098	655	1,270	740	1,512
UTAH									
Total Used..... tons.....	4,100	4,380	2,070	4,300	3,850	2,100	2,160	1,770	1,940
Value..... \$1,000	2,464	2,785	1,762	2,808	1,881	1,624	1,509	1,181	1,505
WASHINGTON									
Fresh..... tons.....	37,200	31,800	36,100	63,500	42,500	20,200	44,100	49,500	39,600
Canned..... do.....	2,200	1,700	2,500	2,700	1,800	3,000	2,500	3,800	3,900
Brined..... do.....	5,300	7,200	7,100	7,100	5,600	7,700	12,000	12,500	11,900
Total Used..... do.....	48,300	44,400	50,800	80,900	55,800	35,300	62,500	74,000	62,000
Price Per Ton-Fresh.....	\$715	\$1,134	\$885	\$774	\$868	\$1,430	\$1,140	\$1,130	\$1,320
Price Per Ton-Proc.....	\$319	\$430	\$404	\$377	\$283	\$506	\$498	\$506	\$386
Price Per Ton-All.....	\$624	\$934	\$746	\$689	\$729	\$1,035	\$951	\$923	\$983
Value..... \$1,000	30,139	41,479	37,888	55,709	40,654	36,527	59,437	68,332	60,918
UNITED STATES									
Fresh..... tons.....	84,460	70,238	67,610	95,090	90,490	53,040	68,620	108,330	87,520
Canned..... do.....	14,400	10,300	10,700	11,100	9,400	11,300	7,400	12,200	14,950
Brined..... do.....	59,500	55,017	45,650	45,273	50,450	51,410	50,240	74,540	67,330
Other Proc. ¹	7,940	10,465	10,650	17,302	13,910	10,750	10,500	17,750	14,710
Total Used..... do.....	166,300	146,020	134,610	168,765	164,250	126,500	136,760	212,820	184,510
Price Per Ton-Fresh.....	\$724	\$939	\$968	\$785	\$799	\$1,190	\$1,090	\$952	\$1,100
Price Per Ton-Proc.....	\$375	\$447	\$427	\$430	\$377	\$515	\$553	\$536	\$509
Price Per Ton-All.....	\$552	\$683	\$699	\$630	\$609	\$799	\$825	\$748	\$788
Value..... \$1,000	91,812	99,792	94,120	106,288	100,096	101,033	112,773	159,140	145,418

*See note on following page. ¹Frozen, juice, etc.

TART CHERRIES—UTILIZED PRODUCTION*, PRICE, VALUE

	1980	1981	1982	1983	1984	1985	1986	1987	1988
New York									
Total used tons	15,200	3,500	10,500	11,500	12,650	11,250	6,150	12,200	10,750
Price per Ton Dollars	382	902	296	920	444	512	460	190	450
Value \$1,000	5,806	3,156	3,112	10,585	5,625	5,764	2,835	2,318	4,835
Pennsylvania									
Total Used tons	2,800	4,000	2,750	4,250	4,500	3,000	6,000	2,150	4,500
Price per Ton Dollars	550	912	414	946	526	536	506	328	512
Value \$1,000	1,540	3,650	1,137	4,020	2,367	1,608	3,040	704	2,301
Michigan									
Fresh tons	2,000	1,000	2,500	1,000	2,500	2,500	1,500	2,500	1,500
Canned do	26,000	13,500	27,500	9,000	27,000	22,500	15,000	27,500	20,000
Frozen do	45,500	29,000	66,000	32,500	65,000	81,000	62,000	75,000	64,000
Total Used do	74,500	44,000	97,500	43,500	97,500	107,500	82,500	112,500	90,000
Price per Ton Dollars	408	928	274	982	508	438	396	150	470
Value \$1,000	30,396	40,788	26,805	42,721	49,555	47,145	32,751	16,890	42,240
Wisconsin									
Total Used tons	5,750	4,800	4,500	2,250	6,000	3,750	1,850	2,450	4,300
Price per Ton Dollars	372	896	260	992	488	414	426	120	390
Value \$1,000	2,139	4,305	1,171	2,232	2,922	1,549	788	295	1,678
TOTAL GREAT LAKES									
Total Used tons	98,250	56,300	115,250	61,500	120,650	125,500	96,500	129,300	109,550
Value \$1,000	39,881	51,899	32,225	59,558	60,469	56,066	39,414	20,207	51,054
Colorado									
Total Used tons	900	800	200	800	500	850	450	400	400
Price per Ton Dollars	434	606	376	838	500	458	798	202	502
Value \$1,000	391	484	75	671	250	390	359	81	201
Utah									
Total Used tons	6,450	6,800	4,500	11,500	6,000	10,500	9,250	10,000	4,800
Price per Ton Dollars	378	744	342	804	480	460	382	166	380
Value \$1,000	2,438	5,065	1,536	9,254	2,879	4,832	3,533	1,654	1,826
Oregon									
Total Used tons	2,500	2,500	2,500	3,000	800	3,250	3,000	3,100	2,000
Price per Ton Dollars	406	644	324	674	508	480	320	110	390
Value \$1,000	1,015	1,612	809	2,023	406	1,560	960	340	780
TOTAL WESTERN STATES									
Total Used tons	9,850	10,100	7,200	15,300	7,300	14,600	12,700	13,500	7,200
Value \$1,000	3,844	7,161	2,420	11,948	3,535	6,782	4,852	2,075	2,807
UNITED STATES									
Fresh tons	3,150	2,000	3,700	2,650	3,950	3,800	2,750	4,500	2,500
Canned do	35,550	19,600	35,650	18,700	36,800	30,450	21,950	35,650	27,900
Frozen do	67,700	43,750	80,400	52,600	83,300	103,400	79,750	94,100	80,800
Other Proc. ¹ do	1,700	1,050	2,700	2,850	3,900	2,450	4,750	8,550	5,550
Total Used do	108,100	66,400	122,450	76,800	127,950	140,100	109,200	142,800	116,750
Price per Ton Dollars	404	890	282	932	500	448	406	156	462
Value \$1,000	43,725	59,060	34,645	71,506	64,004	62,848	44,266	22,282	53,861

* Utilized Production is the amount sold plus quantities used at home or held in storage. Reference is to first utilization only. Some quantities used for freezing, juice, jam, jellies, brining, are included in state totals and United States "Other Proc." but excluded from state and area processing breakdown. ¹Juice, wine, brined.

*ORANGES—UTILIZED PRODUCTION, USE, PRICE, VALUE

	1979	1980	1981	1982	1983	1984	1985	1986	1987
FLORIDA									
Temple									
Fresh	2,784	1,107	838	1,563	762	626	913	1,053	1,292
Processed	3,216	2,493	2,362	3,137	2,138	2,624	2,037	2,347	2,258
Total Prod.	6,000	3,600	3,200	4,700	2,900	3,250	2,950	3,400	3,550
Price per Box	4.57	6.00	5.89	5.97	7.41	8.07	5.44	6.03	7.50
Value of Prod.	27,420	21,595	18,862	28,056	21,489	26,225	16,052	20,513	26,631
Other Early & Midseason									
Fresh	6,476	5,788	4,929	6,067	4,939	4,418	5,121	5,267	5,870
Processed	111,424	99,812	69,071	64,133	64,761	50,582	59,079	60,533	72,630
Total Prod.	117,900	105,600	74,000	70,200	69,700	55,000	64,200	65,800	78,500
Price per Box	5.04	5.27	5.97	6.58	6.89	9.15	5.92	6.56	7.85
Value of Prod.	594,216	556,674	442,116	462,255	480,259	503,120	379,766	431,890	616,608
Valencia									
Fresh	4,514	2,488	2,691	4,253	2,701	2,234	3,839	3,603	3,650
Processed	84,286	64,312	49,109	65,147	44,299	46,666	51,161	50,297	55,850
Total Prod.	88,800	66,800	51,800	69,400	47,000	48,900	55,000	53,900	59,500
Price per Box	5.34	6.23	5.99	7.11	8.52	8.73	5.97	8.02	9.88
Value of Prod.	474,192	416,397	310,431	493,486	400,418	427,019	328,593	432,281	587,911
Total Florida									
Fresh	13,774	9,383	8,458	11,883	8,402	7,278	9,873	9,923	10,812
Processed	198,926	166,617	120,542	132,417	111,198	99,872	112,277	113,177	130,738
Total Prod.	212,700	176,000	129,000	144,300	119,600	107,150	122,150	123,100	141,550
Price per Box	5.15	5.65	5.98	6.82	7.54	8.93	5.93	7.19	8.70
Value of Prod.	1,095,828	994,666	771,409	983,797	902,166	956,364	724,411	884,684	1,231,150
CALIFORNIA									
Navel & Misc.									
Fresh	21,700	24,430	21,200	27,200	25,350	23,100	26,500	26,500	24,900
Processed	10,900	14,320	5,300	13,000	8,350	3,100	6,500	8,000	6,600
Total Prod.	32,600	38,750	26,500	40,200	33,700	26,200	33,000	34,500	31,500
Price per Box	3.93	4.01	7.22	4.61	5.57	11.36	7.15	7.04	7.82
Value of Prod.	128,118	155,341	191,436	185,328	187,721	297,610	235,980	242,840	246,462
Valencia									
Fresh	17,780	13,200	12,200	16,050	12,200	17,300	17,100	15,200	17,500
Processed	9,020	13,300	3,200	19,850	2,600	8,900	3,800	8,200	7,500
Total Prod.	26,800	26,500	15,400	35,900	14,800	26,200	20,900	23,400	25,000
Price per Box	3.75	5.15	11.51	3.66	14.22	7.95	6.17	8.17	8.92
Value of Prod.	100,500	136,456	177,304	131,371	210,440	208,360	128,972	191,284	223,100
Total California									
Fresh	39,480	37,630	33,400	43,250	37,550	40,400	43,600	41,700	42,400
Processed	19,920	27,620	8,500	32,850	10,950	12,000	10,300	16,200	14,100
Total Prod.	59,400	65,250	41,900	76,100	48,500	52,400	53,900	57,900	56,500
Price per Box	3.85	4.47	8.80	4.16	8.21	9.66	6.77	7.50	8.31
Value of Prod.	228,618	291,797	368,740	316,699	398,161	505,970	364,952	434,124	469,562
ARIZ. & TEX.*									
Fresh	4,280	4,530	5,440	5,885	2,900	1,930	2,150	2,745	2,696
Processed	3,250	2,400	3,550	3,595	1,410	520	460	830	544
Total Prod.	7,530	6,930	8,990	9,480	4,310	2,450	2,610	3,575	3,240
Price per Box	4.07	4.39	5.17	4.72	5.90	9.48	7.25	6.80	8.46
Value of Prod.	30,682	30,413	46,508	44,699	25,431	23,225	18,914	24,328	27,398
UNITED STATES									
Fresh	57,534	51,545	47,298	61,018	48,852	49,608	55,623	54,368	55,908
Processed	222,096	196,637	132,592	168,862	123,558	112,392	123,037	130,207	145,382
Total Prod.	279,630	248,180	179,890	229,880	172,410	162,000	178,660	184,575	201,290
Price per Box	4.85	5.30	6.60	5.85	7.69	9.17	6.20	7.28	8.59
Value of Prod.	1,355,128	1,316,876	1,186,657	1,345,195	1,325,758	1,485,559	1,108,277	1,343,136	1,728,110

*Season beginning year shown. Quantities are in units of 1,000 boxes. Price per Box in dollars, and Value of Production in thousands of dollars. Net weight per box—Florida-90 pounds; California and Arizona-75 pounds; Texas-85 pounds. † Arizona only in 1984.

PROCESSED FLORIDA ORANGES*

	1979	1980	1981	1982	1983	1984	1985	1986	1987
Frozen Conc.	174,883	145,309	105,150	114,627	94,547	86,112	96,061	96,182	110,206
Chilled Juice	24,428	19,640	16,293	18,084	16,981	14,903	(a)	(a)	(a)
Chilled See. & Salads	309	227	225	170	(a)	(a)	(a)	(a)	(a)
Other Processed	6,957	6,353	4,473	2,665	2,909	1,907	18,628	20,609	24,229
TOTAL	206,577	171,529	126,141	135,546	114,437	102,922	114,689	116,791	134,435

*Season beginning year shown. Quantities are in units of 1,000 boxes, net weight 90 lbs. per box. Includes tangelos, temples, tangerines and K-Early citrus. (a) Included in "Other Processed".

*GRAPEFRUIT—UTILIZED PRODUCTION, USE, PRICE

	1979	1980	1981	1982	1983	1984	1985	1986	1987
FLORIDA									
Pink Seedless									
Fresh	10,495	8,903	8,390	9,268	9,019	9,638	12,885	13,852	15,090
Processed	5,305	5,697	6,410	3,532	4,381	6,662	5,115	6,148	6,810
Total Prod.	15,800	14,600	14,800	12,800	13,400	16,300	18,000	20,000	21,900
Price per Box, Fresh	5.76	6.98	6.24	5.70	6.65	8.05	7.30	8.10	8.45
Price per box, Proc.	3.56	3.20	1.41	1.45	3.08	3.92	4.82	5.88	5.15
White Seedless									
Fresh	8,900	8,195	8,329	9,045	7,642	5,350	6,735	7,086	8,020
Processed	22,200	20,205	18,971	12,755	15,358	19,450	18,865	19,814	21,180
Total Prod.	31,100	28,400	27,300	21,800	23,000	24,800	25,600	26,900	29,200
Price per box, Fresh	4.75	5.97	5.31	4.11	4.35	5.44	5.80	6.30	8.45
Price per box, Proc.	4.13	4.29	2.39	1.97	3.16	4.32	4.98	6.01	6.35
Other Varieties									
Fresh	106	69	.....	.....	.....	.....	.....	.....	.....
Processed	7,794	7,231	6,000	4,800	4,500	2,900	3,150	2,900	2,750
Total Prod.	7,900	7,300	6,000	4,800	4,500	2,900	3,150	2,900	2,750
Price per box, Fresh	(a)	(a)	.....	.....	.....	.....	.....	.....	.....
Price per box, Proc.	4.19	4.17	2.43	2.00	3.41	4.08	4.87	5.87	6.49
Total Florida									
Fresh	19,501	17,167	16,719	18,313	16,661	14,988	19,620	20,938	23,110
Processed	35,299	33,133	31,381	21,087	24,239	29,012	27,130	28,862	30,740
Total Prod.	54,800	50,300	48,100	39,400	40,900	44,000	46,750	49,800	53,850
Price per Box, Fresh	5.30	6.50	5.78	4.91	5.60	7.12	6.79	7.49	8.45
Price per Box, Proc.	4.06	4.07	2.20	1.89	3.19	4.20	4.94	5.97	6.10
CALIFORNIA									
Desert Valleys									
Fresh	1,740	2,310	1,925	2,420	2,020	2,600	2,400	2,600	2,800
Processed	2,460	1,950	1,475	1,680	1,320	1,200	1,200	1,700	1,400
Total Prod.	4,200	4,260	3,400	4,100	3,340	3,800	3,600	4,300	4,200
Price per Box, Fresh	4.66	7.19	5.28	4.70	6.68	9.48	9.86	8.48	7.28
Price per Box, Proc.	.68	.97	.08	.12	-.08	1.09	.70	.90	1.16
Other Areas									
Fresh	1,720	2,180	1,780	2,000	2,600	3,600	3,300	3,250	3,400
Processed	1,580	1,620	970	1,200	1,300	1,400	1,200	1,750	1,300
Total Prod.	3,300	3,800	2,750	3,200	3,900	5,000	4,500	5,000	4,700
Price per Box, Fresh	6.66	8.03	5.28	6.34	6.72	9.86	10.32	9.66	9.44
Price per Box, Proc.	.62	.57	-.02	.04	-.16	1.06	.60	.73	1.00
Total California									
Fresh	3,460	4,490	3,705	4,420	4,620	6,200	5,700	5,850	6,200
Processed	4,040	3,570	2,445	2,880	2,620	2,600	2,400	3,450	2,700
Total Prod.	7,500	8,060	6,150	7,300	7,240	8,800	8,100	9,300	8,900
Price per Box, Fresh	5.65	7.60	5.28	5.44	6.70	9.70	10.13	9.15	8.49
Price per Box, Proc.	.66	.79	.04	.09	-.12	1.07	.65	.81	1.08
TEXAS									
Fresh	4,200	4,650	7,230	7,800	2,860	(b)	200	1,555	2,785
Processed	3,700	2,050	6,670	3,400	340	(b)	20	370	1,015
Total Prod.	7,900	6,700	13,900	11,200	3,200	(b)	220	1,925	3,800
Price per Box, Fresh	3.93	4.50	3.61	2.66	3.14	(b)	9.93	9.04	7.94
Price per Box, Proc.	2.63	3.09	1.81	1.00	1.19	(b)	4.48	4.60	4.52
ARIZONA									
Fresh	1,320	1,600	1,110	1,620	1,545	1,950	1,540	1,390	1,000
Processed	1,680	1,200	1,290	1,080	725	1,050	860	810	500
Total Prod.	3,000	2,800	2,400	2,700	2,270	3,000	2,400	2,200	1,500
Price per Box, Fresh	5.03	6.11	5.01	4.17	5.88	8.10	7.14	7.48	6.18
Price per Box, Proc.	.68	1.00	.08	.12	-.08	1.09	.69	.90	1.16
UNITED STATES									
Fresh	28,481	27,907	28,764	32,153	25,686	23,138	27,060	29,733	33,095
Processed	44,719	39,953	41,786	28,447	27,924	32,662	30,410	33,492	34,955
Total Prod.	73,200	67,860	70,550	60,600	53,610	55,800	57,470	63,225	68,050
Price per Box, Fresh	5.13	6.32	5.14	4.40	5.54	7.77	7.41	7.84	8.36
Price per Box, Proc.	3.51	3.64	1.94	1.53	2.77	3.93	4.58	5.44	5.70

* Season beginning year shown. Quantities are in units of 1,000 boxes. Price per Box in dollars. Net weight per box — Florida, 85 pounds; Texas, 80 pounds; Calif. Desert Valleys and Arizona, 64 pounds; Other Calif., 67 pounds. (a) Insignificant and included with processed. (b) No commercial harvest due to freeze.

PROCESSED FLORIDA GRAPEFRUIT*

	1979	1980	1981	1982	1983	1984	1985	1986	1987
Frozen Conc	18,506	19,490	20,052	13,977	18,728	22,996	21,572	24,143	26,690
Chilled Juice	3,592	2,844	1,697	1,314	1,320	1,065	1,189	2,295	1,965
Chilled Sections & Salads ..	801	645	628	417	320	(a)	(a)	(a)	(a)
Other Processed	12,400	10,154	9,004	5,379	3,871	4,951	4,369	2,424	2,085
TOTAL	35,299	33,133	31,381	21,087	24,239	29,012	27,130	28,862	30,740

*Season beginning year shown. Quantities are in units of 1,000 boxes, net weight 85 lbs. per box. (a) Included with "Other Processed".

APRICOTS—UTILIZED PRODUCTION*, USE, PRICE, VALUE

	1980	1981	1982	1983	1984	1985	1986	1987	1988
WASHINGTON									
Fresh tons..	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Processed do..	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Total Used do..	2,500	1,300	2,900	2,900	3,400	2,400	4,300	3,900	6,100
Price per Ton Dollars	386	593	531	604	490	628	772	709	682
Value .....\$1,000	965	771	1,540	1,751	1,665	1,508	3,319	2,765	4,162
CALIFORNIA									
Fresh tons..	9,500	9,500	8,000	6,500	12,200	17,000	6,300	12,300	12,600
Canned do..	80,500	43,500	62,000	43,800	66,800	61,000	27,000	53,000	44,500
Dried do..	27,100	25,000	33,000	28,200	22,500	13,000	9,500	23,600	17,700
Frozen do..	7,900	8,500	12,000	11,000	11,500	12,000	7,200	13,100	12,200
Total Used do..	125,000	86,500	115,000	89,500	113,000	103,000	50,000	102,000	87,000
Price per Ton Dollars	288	308	299	306	302	255	371	333	340
Value .....\$1,000	36,000	26,615	34,337	27,404	34,178	26,276	18,564	33,970	29,613
UNITED STATES¹									
Fresh Tons..	13,130	12,230	10,810	10,550	15,780	19,980	10,750	16,550	18,800
Canned do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dried do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Frozen do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Used do..	129,000	89,380	118,060	93,800	117,080	106,330	55,100	106,800	94,100
Price per Ton Dollars	291	311	304	315	308	265	402	348	363
Value .....\$1,000	37,505	27,765	35,933	29,519	36,081	28,137	22,174	37,113	34,151

*Utilized production is the amount sold plus quantities used at home or held in storage. Reference is to first utilization only. ¹Includes Utah. (a) Not published to avoid disclosure of individual operations.
n.a. - Not available.

CRANBERRIES—UTILIZED PRODUCTION*, USE, PRICE†, VALUE

	1980	1981	1982	1983	1984	1985	1986	1987	1988
MASSACHUSETTS									
Fresh 1,000 bbl..	110.0	205.0	169.0	177.0	170.0	167.0	159.0	143.0	n.a.
Processed do..	1,016.0	875.0	998.0	1,217.0	1,442.0	1,472.0	1,529.0	1,277.0	n.a.
Shrinkage do..	59.0	92.0	120.0	27.0	51.0	48.0	125.0	29.0	n.a.
Production Used do..	1,185.0	1,172.0	1,287.0	1,421.0	1,663.0	1,687.0	1,813.0	1,449.0	1,910.0
Price per bbl Dollars	33.50	41.50	46.30	51.70	54.50	54.80	44.80	44.40	n.a.
Value .....\$1,000	39,698	48,639	59,588	73,466	90,634	92,448	81,222	64,336	84,804
Harvested Acres	11,200	11,200	11,200	11,200	11,200	11,300	11,300	11,800	11,800
Yield per Acre bbl..	105.8	104.6	114.9	126.9	148.5	149.3	160.4	122.8	161.9
NEW JERSEY									
Fresh 1,000 bbl..	.....	.....	.....	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Processed do..	240.1	223.5	289.0	229.0	271.8	319.0	324.0	279.0	n.a.
Shrinkage do..	4.9	4.5	6.0	4.0	2.2	1.0	1.0	1.0	n.a.
Production Used do..	245.0	228.0	295.0	233.0	274.0	320.0	325.0	280.0	370.0
Price per bbl Dollars	33.20	41.60	46.80	52.40	55.10	55.30	45.40	45.10	n.a.
Value .....\$1,000	8,134	9,485	13,806	12,209	15,097	17,696	14,755	12,628	16,687
Harvested Acres	2,900	2,900	3,000	3,100	3,200	3,300	3,300	3,200	3,300
Yield per Acre bbl..	84.5	78.6	98.3	75.2	85.6	97.0	98.5	87.5	112.0
WISCONSIN									
Fresh 1,000 bbl..	216.0	265.0	314.0	131.0	114.0	106.0	132.0	136.0	n.a.
Processed do..	821.0	665.0	953.0	958.0	1,058.0	1,096.0	1,129.0	1,160.0	n.a.
Shrinkage do..	43.0	38.0	33.0	43.0	28.0	28.0	19.0	24.0	n.a.
Production Used do..	1,080.0	968.0	1,300.0	1,132.0	1,200.0	1,230.0	1,280.0	1,320.0	1,450.0
Price per bbl Dollars	32.80	41.30	47.10	52.20	54.10	53.70	44.40	44.40	n.a.
Value .....\$1,000	35,424	39,988	61,261	59,107	64,960	66,051	56,832	58,608	64,380
Harvested Acres	7,200	7,100	7,200	7,300	7,400	7,500	7,900	8,100	8,300
Yield per Acre bbl..	150.0	136.3	180.6	115.1	162.2	164.0	162.0	163.0	174.7
WASHINGTON									
Fresh 1,000 bbl..	.....	9.5	11.0	13.3	9.8	40.7	46.2	16.8	n.a.
Processed do..	100.8	117.9	76.0	109.3	90.7	106.3	53.4	111.5	n.a.
Shrinkage do..	3.2	1.6	5.0	2.4	2.5	1.0	.4	1.7	n.a.
Production Used do..	104.0	129.0	92.0	125.0	103.0	148.0	100.0	130.0	135.0
Price per bbl Dollars	33.10	41.70	47.10	52.50	55.40	55.50	45.30	45.00	n.a.
Value .....\$1,000	3,442	5,379	4,333	6,562	5,706	8,214	4,530	5,850	6,075
Harvested Acres	1,100	1,100	1,100	1,100	1,100	1,200	1,200	1,200	1,200
Yield per Acre bbl..	94.5	117.3	83.6	113.6	93.6	123.3	83.3	108.3	112.5

*Does not include quantities set aside under marketing order or other quantities not utilized. Marketing order set asides exported however are included. †Equivalent returns at first delivery point. ¹Season average prices not available, 1987 prices used to compute 1988 value.

CRANBERRIES—UTILIZED PRODUCTION*, USE—Continued

	1980	1981	1982	1983	1984	1985	1986	1987	1988
OREGON									
Fresh 1,000 bbl..	.1	.1	.1	n.a.	n.a.	.1	n.a.	.5	n.a.
Processed do..	81.7	95.7	64.8	74.8	82.0	99.9	122.0	141.5	n.a.
Shrinkage do..	1.7	.2	.1	.2	n.a.	n.a.	n.a.	n.a.	n.a.
Production Used do..	83.5	96.0	65.0	75.0	82.0	100.0	122.0	142.0	154.0
Price per bbl Dollars	33.10	41.70	47.10	52.50	55.40	55.50	45.30	44.90	n.a.
Value .....\$1,000	2,764	4,003	3,062	3,938	4,543	5,500	5,527	6,376	6,915
Harvested Acres	790	850	810	850	920	1,100	1,200	1,200	1,300
Yield per Acre bbl..	105.7	112.9	80.2	88.2	89.1	90.9	102.0	118.3	118.5
UNITED STATES									
Fresh 1,000 bbl..	326.1	479.6	494.1	321.3	293.8	313.8	337.2	296.3	n.a.
Processed do..	2,259.6	1,977.1	2,380.8	2,588.1	2,944.5	3,093.2	3,157.4	2,969.0	n.a.
Shrinkage do..	111.8	136.3	164.1	76.6	83.7	78.0	145.4	55.7	n.a.
Production Used do..	2,697.5	2,593.0	3,039.0	2,986.0	3,322.0	3,485.0	3,640.0	3,321.0	4,019.0
Price per bbl Dollars	33.20	41.50	46.70	52.00	54.50	54.50	44.70	44.50	n.a.
Value .....\$1,000	89,462	107,494	142,050	155,282	180,940	189,925	162,866	147,798	178,861
Harvested Acres	23,190	23,150	23,310	23,550	23,820	24,400	24,900	25,500	25,900
Yield per Acre bbl..	116.3	112.0	130.4	126.8	139.5	142.8	146.2	130.2	155.2

See notes on preceding page.

CALIFORNIA OLIVES — UTILIZED PRODUCTION, PRICE, VALUE

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Fresh Tons..	300	300	500	400	400	500	500	500	500
Crushed Oil do..	3,500	2,000	2,500	600	2,900	5,800	6,000	3,000	3,000
Canned do..	76,800	37,900	98,000	48,000	76,700	78,100	85,000	55,000	70,000
Other ¹ do..	28,400	4,700	45,500	12,000	10,600	13,600	20,000	9,000	14,000
Total Used do..	109,000	44,900	146,500	61,000	90,600	96,000	111,500	67,500	87,500
Price per Ton\$	368	695	517	519	560	559	594	625	564
Value .....\$1,000	40,137	31,222	75,795	31,641	50,712	53,635	66,184	42,192	49,318

¹Beginning in 1984 California Spanish Green, Sicilian Styles, chopped, minced, brined and other cures formerly included in "other" are included in "Canned". (a) Included in "other".

PEACHES — UTILIZED PRODUCTION, PRICE, VALUE

	1980	1981	1982	1983	1984	1985	1986	1987	1988
California — Clingstone									
Fresh Mil. Lbs.	2.2	3.0	2.0	.....	.....	.....	.....	.....	.....
Canned do..	1,376.1	1,086.3	920.0	614.5	952.0	910.0	842.0	791.0	883.0
Dried do..	.....	.....	.....	.....	.....	.....	.....	.....	.....
Frozen do..	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other do..	n.a.	n.a.	n.a.	n.a.	14.0	7.5	31.5	59.0	62.0
Total Used do..	1,382.0	1,106.0	943.0	619.0	966	917.5	873.5	850.0	945.0
Price per lb cents	9.40	10.40	9.20	9.00	10.00	11.0	9.8	10.6	11.6
Value .....\$1,000	129,908	115,372	86,820	55,710	96,600	100,925	85,603	90,100	109,620
California — Freestone									
Fresh Mil. Lbs.	290.0	286.0	266.0	303.0	313.0	315.0	302.0	310.0	320.0
Canned do..	78.0	42.2	40.0	36.0	36.0	50.0	48.0	48.0	47.3
Dried do..	34.0	34.8	45.0	36.0	28.0	32.5	32.5	35.0	41.2
Frozen do..	n.a.	71.0	64.0	60.0	80.0	88.5	112.5	118.0	114.5
Other do..	n.a.	n.a.	n.a.	n.a.	.....	.....	.....	.....	.....
Total Used do..	476.0	434.0	415.0	435.0	457.0	486.0	495.0	511.0	523.0
Price per lb cents	9.90	12.30	10.60	11.30	9.8	11.4	13.8	13.4	15.2
Value .....\$1,000	47,124	53,556	43,861	49,041	44,798	55,179	68,508	68,252	79,600
Total California									
Fresh Mil. Lbs.	292.2	289.0	268.0	303.0	313.0	315.0	302.0	310.0	320.0
Canned do..	1,454.1	1,128.5	960.0	650.5	988.0	960.0	890.0	839.0	930.3
Dried do..	34.0	34.8	45.0	36.0	28.0	32.5	32.5	35.0	41.2
Frozen do..	n.a.	n.a.	64.0	60.0	80.0	88.5	112.5	118.0	114.5
Other do..	n.a.	n.a.	21.0	4.5	14.0	7.5	31.5	59.0	62.0
Total Used do..	1,858.0	1,540.0	1,358.0	1,054.0	1,423.0	1,403.5	1,368.5	1,361.0	1,468.0
Price per lb cents	9.96	10.94	9.62	9.94	9.94	11.1	11.3	11.6	12.9
Value .....\$1,000	177,032	168,628	130,681	104,751	141,398	156,104	154,111	158,352	189,220
United States									
Fresh Mil. Lbs.	1,324.1	1,331.0	976.9	987.1	1,286.9	924.8	1,112.8	1,123.3	1,231.8
Canned do..	1,498.3	1,173.7	983.9	675.4	1,028.5	982.6	926.9	876.8	982.0
Dried do..	34.0	34.8	45.0	36.0	28.0	32.5	32.5	35.0	41.2
Frozen do..	77.1	78.3	70.5	64.3	89.0	93.3	136.3	144.9	134.9
Other do..	20.6	22.0	25.6	11.0	35.5	13.2	31.4	68.2	69.1
Total used do..	2,954.1	2,639.8	2,101.9	1,753.8	2,467.9	2,046.4	2,239.9	2,248.2	2,459.0
Price per lb cents	12.4	13.3	14.40	14.80	13.0	15.0	14.6	14.2	16.1
Value .....\$1,000	367,170	351,610	302,550	259,801	320,671	307,338	327,155	320,202	395,165

PEACHES—UTILIZED PRODUCTION, PRICE, VALUE

State	Utilized Production			Price Per Pound			Value of Utilized Prod.		
	1986	1987	1988	1986	1987	1988	1986	1987	1988
	Million pounds			Dollars			1,000 Dollars		
Alabama	6.0	10.0	22.0	.272	.236	.202	1,632	2,360	4,444
Arkansas	9.5	1.4	20.0	.173	.281	.150	1,643	393	2,997
California									
Freestone	495.0	511.0	523.0	.138	.134	.152	68,508	68,252	79,600
Colorado	6.7	17.0	15.5	.310	.224	.269	2,077	3,814	4,175
Connecticut	2.6	2.5	2.6	.480	.520	.550	1,248	1,300	1,430
Delaware	2.7	.9	3.1	.185	.189	.213	500	170	660
Georgia	101.0	98.0	132.0	.197	.181	.201	19,892	17,758	26,498
Idaho	11.0	10.0	11.2	.236	.167	.260	2,596	1,672	2,914
Illinois	20.5	19.0	19.5	.240	.275	.240	4,920	5,220	4,680
Indiana	4.0	7.5	4.5	.330	.289	.309	1,320	2,168	1,391
Kansas	4.5	2.4	3.7	.370	.300	.370	1,665	720	1,369
Kentucky	2.0	8.9	5.5	.204	.245	.280	408	2,181	1,540
Louisiana	.2	.5	5.4	.340	.460	.320	68	230	1,728
Maryland	20.0	9.0	9.8	.204	.154	.189	4,088	1,385	1,850
Massachusetts	1.8	2.0	2.1	.480	.520	.550	864	1,040	1,155
Michigan	50.0	59.0	45.0	.177	.161	.178	8,864	9,526	8,028
Mississippi	.3	.5	3.5	.330	.310	.265	99	155	928
Missouri	12.0	13.0	14.0	.210	.187	.225	2,520	2,431	3,150
New Jersey	100.0	76.0	80.0	.236	.227	.244	23,643	17,284	19,524
New York	14.0	13.8	13.7	.236	.215	.272	3,308	2,971	3,726
North Carolina	20.9	23.0	30.0	.157	.168	.167	3,281	3,864	5,010
Ohio	2.5	9.0	6.0	.290	.280	.310	725	2,520	1,860
Oklahoma	5.5	4.0	26.0	.334	.368	.248	1,837	1,472	6,448
Oregon	13.0	14.0	13.0	.273	.275	.281	3,554	3,847	3,657
Pennsylvania	100.0	85.0	80.0	.182	.175	.196	18,179	14,916	15,704
South Carolina	248.0	300.0	290.0	.160	.149	.185	39,700	44,790	53,592
Tennessee	3.7	2.5	9.0	.240	.346	.297	888	865	2,673
Texas	9.5	4.8	16.1	.390	.380	.357	3,705	1,824	5,748
Utah	10.0	9.5	10.8	.177	.160	.190	1,859	1,520	2,052
Virginia	26.0	24.0	27.0	.212	.171	.147	5,518	4,097	3,981
Washington	40.0	43.0	50.0	.228	.165	.193	9,105	7,076	9,660
West Virginia	23.0	17.0	20.0	.145	.134	.169	3,338	2,281	3,373
Total Above	1,366.4	1,398.2	1,514.0	.177	.165	.189	241,552	230,102	285,545
California									
Clingstone	873.5	850.0	945.0	.098	.106	.116	85,603	90,100	109,620
U.S.	2,239.9	2,248.2	2,459.0	.146	.142	.161	327,155	320,202	395,165

PEARS — UTILIZED PRODUCTION, USE, PRICE, VALUE

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Eastern & Central ¹ — All Varieties									
Fresh 1,000 Tons	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Canned do	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dried do	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Used..... do	35.0	30.6	36.1	31.2	35.6	28.1	34.4	27.0	29.9
Price per Ton..... Dollars	241.00	242.00	234.00	274.00	246.00	262.00	243.00	266.00	266.00
Value..... 1,000 \$	8,434	7,426	8,441	8,562	8,744	7,349	8,342	7,189	7,965
California — Bartlett									
Fresh 1,000 Tons	72.0	70.0	81.0	44.7	66.3	69.0	70.0	74.5	64.0
Canned do	306.9	288.8	225.8	208.4	218.6	204.5	206.0	242.5	220.0
Dried do	8.1	7.2	7.2	6.4	4.6	8.5	9.0	8.0	8.0
Total Used..... do	387.0	366.0	314.0	259.5	289.5	282.0	285.0	325.0	292.0
Price per Ton..... Dollars	185.00	176.00	148.00	142.00	176.00	233.00	223.00	176.00	237.00
Value..... 1,000 \$	71,496	64,514	46,410	36,812	51,007	65,814	63,445	57,058	69,308

See notes next page.

PEARS — UTILIZED PRODUCTION, USE, PRICE, VALUE — Continued

	1980	1981	1982	1983	1984	1985	1986	1987	1988
California — Other Varieties									
Fresh 1,000 Tons..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Canned do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dried do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total used do..	10.7	10.0	7.5	8.2	10.0	10.5	9.0	12.0	11.0
Price per Ton ...Dollars	159.00	177.00	234.00	331.00	253.00	373.00	522.00	645.00	480.00
Value 1,000\$	1,639	1,772	1,754	2,718	2,527	3,921	4,695	7,736	5,281
Total California									
Fresh 1,000 Tons..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Canned do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dried do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total do..	397.7	376.0	321.5	267.7	299.5	292.5	294.0	337.0	303.0
Price per Ton ...Dollars	184.00	176.00	150.00	148.00	179.00	238.00	232.00	192.00	246.00
Value 1,000\$	73,195	66,286	48,164	39,530	53,534	69,735	68,140	64,794	74,589
Washington — Bartlett									
Fresh 1,000 Tons..	32.9	42.4	44.6	56.4	24.5	33.3	39.5	56.0	42.0
Canned† do..	110.1	102.1	96.7	84.4	76.5	77.7	86.5	115.0	105.0
Dried do..	†	†	†	†	†	†	†	†	†
Total used do..	143.0	144.5	141.3	140.8	101.0	111.0	126.0	171.0	147.0
Price per ton ...Dollars	185.00	147.00	154.00	180.00	218.00	248.00	225.00	189.00	237.00
Value 1,000\$	26,459	21,303	21,736	25,325	21,996	27,484	28,352	32,322	34,818
Washington — Other varieties									
Fresh 1,000 Tons..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Canned do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dried do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total used do..	113.0	130.8	123.5	138.0	103.0	114.0	140.0	165.0	160.0
Price per Ton ...Dollars	249.0	260.00	245.00	171.00	325.00	365.00	339.00	215.00	342.00
Value 1,000\$	28,112	34,049	30,269	23,648	33,432	41,642	47,480	35,395	54,756
Total Washington									
Fresh 1,000 Tons..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Canned† do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dried do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total used do..	256.0	275.3	264.8	278.8	204.0	225.0	266.0	336.0	307.0
Price per ton ...Dollars	213.00	201.00	196.00	176.00	272.00	307.00	285.00	202.00	292.00
Value 1,000\$	54,571	55,352	52,005	48,973	55,428	69,126	75,832	67,717	89,574
Oregon — Bartlett									
Fresh 1,000 Tons..	13.0	23.8	24.5	22.0	12.7	17.0	19.0	23.0	17.5
Canned† do..	67.0	61.2	45.5	41.0	31.3	58.0	31.0	55.0	52.5
Dried do..	†	†	†	†	†	†	†	†	†
Total Used do..	80.0	85.0	70.0	63.0	44.0	75.0	50.0	78.0	70.0
Price per Ton ...Dollars	170.00	115.00	130.00	149.00	217.00	230.00	243.00	183.00	244.00
Value 1,000\$	13,604	9,805	9,104	9,400	9,569	17,282	12,161	14,255	17,045
Oregon — Other Varieties									
Fresh 1,000 Tons..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Canned† do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dried do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Used do..	120.0	117.0	105.0	125.0	106.0	118.0	112.0	150.0	155.0
Price per Ton ...Dollars	202.00	224.00	268.00	188.00	288.00	302.00	331.00	197.00	279.00
Value 1,000\$	24,288	26,228	28,142	23,473	30,542	35,588	37,036	29,613	43,235
Total Oregon									
Fresh 1,000 Tons..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Canned† do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dried do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Used do..	200.0	202.0	175.0	188.0	150.0	193.0	162.0	228.0	225.0
Price per Ton ...Dollars	189.00	178.00	213.00	175.00	267.00	274.00	304.00	192.00	268.00
Value 1,000\$	37,892	36,033	37,246	32,873	40,111	52,870	49,197	43,868	60,280
Total Western*									
Fresh 1,000 Tons..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Canned do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dried do..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total Used do..	861.3	863.4	766.6	743.3	661.2	718.9	726.0	910.6	840.7
Price per Ton ...Dollars	194.00	185.00	181.00	166.00	228.00	270.00	268.00	196.00	269.00
Value 1,000\$	167,398	159,895	138,738	123,302	150,986	193,760	194,418	178,523	226,139
United States									
Fresh 1,000 Tons..	345.1	378.0	368.1	384.5	324.1	349.7	375.4	456.4	438.6
Canned† do..	551.3	516.0	434.6	390.0	372.7	397.3	384.9	481.2	432.0
Dried do..	†	†	†	†	†	†	†	†	†
Total Used do..	896.4	894.0	802.7	774.5	696.8	747.0	760.4	937.6	870.6
Price per Ton ...Dollars	196.00	187.00	183.00	170.00	229.00	269.00	267.00	198.00	269.00
Value 1,000\$	175,832	167,321	147,179	131,864	159,730	201,109	202,760	185,712	234,104

* Includes Conn., N.Y., Pa., and Mich. † Some Quantities otherwise processed may be included with canned to avoid disclosure of individual operations. * Includes Colo., Utah, Wash., Ore., Calif.

OF THE CANNING, FREEZING, PRESERVING INDUSTRIES

CANNED VEGETABLE PACKS

Source: California League of Food Processors; National Food Processors Association. With Permission.

REGIONAL DEFINITIONS - With the 1984 pack reports NFPA established the following regional definitions for all NFPA statistical reports (and adjusted 1982 and 1983 figures accordingly):

EAST - ME, NH, VT, MA, CT, RI, NY, PA, NJ, DE, MD, VA, WV

SOUTH - NC, SC, GA, FL, AL, MS, TN, AR, LA, OK, TX, KY

MIDWEST - OH, IN, MI, IL, WI, MN, IA, MO, ND, SD, NE, KS

WEST - WA, OR, CA, ID, NV, MT, WY, UT, CO, AZ, AK, NM, HI

The uninitiated will no longer be able to determine the major packing states of a specific commodity from these tables. To make this determination, Almanac users are referred to Section VII "Raw Product Statistics".

SUMMARY OF CANNED VEGETABLE PACKS

Thousands of Cases, basis 24 No. 303 Cans. Figures Rounded — Season beginning year shown.

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Asparagus.....	2,819	2,535	2,844	2,727	2,549	2,928	3,097	3,154	3,361	3,846
Beans, green (a)...	62,624	54,769	49,797	46,335	44,227	49,566	53,229	47,003	54,138	†44,784
Beans, wax (a)...	3,657	3,384	3,012	2,496	2,279	2,523	2,274	1,935	1,943	†1,071
Beans, Lima.....	3,061	2,833	2,602	2,275	2,338	2,316	1,966	1,738	1,329	1,267
Beets.....	15,103	10,878	9,657	10,868	9,039	9,292	9,386	9,042	12,127	P
Carrots.....	7,267	4,365	5,251	5,932	4,695	5,100	4,486	4,344	5,196	P
Carrots & Peas (b)...	2,096	1,624	1,360	D	D	D	D	D	D	D
Corn, sweet.....	60,022	50,574	57,949	60,522	51,595	56,879	55,729	55,090	59,177	50,831
Leafy greens.....	3,195	2,624	2,120	1,584	D	D	D	D	D	D
Okra,Okra & Tom. (b)	436	391	264	359	D	D	D	D	D	D
Peas, field (b)....	2,542	1,965	2,895	1,998	D	D	D	D	D	B
Peas, green.....	36,492	30,056	27,296	24,790	20,827	23,312	29,306	20,919	23,057	12,494
Pimientos (b)....	530	540	608	756	D	D	D	D	D	D
Potatoes, swt....	9,174	5,917	7,955	7,049	5,315	5,283	6,149	7,469	6,055	P
Potatoes, wht....	6,517	5,857	7,103	5,714	D	D	D	D	D	D
Pump. & Sq. (b)...	3,997	3,744	3,975	4,404	D	D	D	D	D	D
Sauerkraut.....	9,016	8,173	8,686	8,417	5,844	7,011	7,687	7,719	6,985	P
Spinach.....	8,121	6,314	5,458	D	D	D	D	D	D	D
Succotash (b)....	771	828	777	D	D	D	D	D	D	D
Tomatoes (b)....	42,789	36,697	38,325	43,286	37,597	43,170	37,485	38,955	44,634	50,626
Tomatoes, Calif. -										
Conc. Crushed... 10,107	16,399	13,612	19,803	23,964	23,206	22,100	24,193	28,603		D
T. Juice.....	31,517	27,617	17,507	23,955	D	D	D	D	D	D
T. Chili Sc.....	1,977	2,038	1,680	1,826	1,665	1,965	2,086	2,326	1,622	D
T. Puree.....	10,395	8,141	6,900	9,788	8,703	(d)	(d)	(d)	(d)	D
Total Basis 303's.	334,225	288,263	277,633	284,884	220,637	232,551	234,980	223,887	248,227	P
Total Basis 2's...	274,733	236,952	228,214	234,175	181,364	191,157	193,154	184,035	204,043	P
Total actual cases.	294,836	255,389	248,611	248,882	191,396	204,222	207,450	197,483	217,794	P
* Products in tots.	25	25	25	22	14	13	13	13	13	.....

(D) Reports discontinued to avoid disclosure of individual operations. (a) Calendar year pack thru 1985.
 (b) Calendar year pack. (d) Total U.S. figure discontinued, 303 conversion for Calif. not available.
 P - Data not available at press time. † Pack 6/1 to 11/1/88.

THE 1988-89 DIRECTORY OF THE CANNING, FREEZING, PRESERVING INDUSTRIES

Twelfth Biennial Edition

FOR FOOD BUYERS, The Directory is the ideal source book. It's the easy way to find basic food products, to find new products to spruce up your menu and to fill out your product line. This well-organized, easy to use directory will give you more detail about each company than any other directory. All of the information that you need to do business intelligently and efficiently with the packer is here. \$110 each

By the Publishers of **THE ALMANAC**

Edward E. Judge & Sons, Inc.

P.O. Box 866, Westminster, MD 21157 USA (301) 876-2052



ASPARAGUS PACKS IN THE UNITED STATES*

Source: National Food Processors Association. With Permission.

Thousands of Cases, basis 24 No. 303 Cans.

1940	3,974	1947	4,677	1954	6,073	1961	8,357	1968	6,925	1975	3,551
1941	3,907	1948	4,417	1955	7,623	1962	9,053	1969	6,817	1976	3,609
1942	5,138	1949	5,390	1956	6,615	1963	9,263	1970	5,913	1977	3,705
1943	4,710	1950	5,531	1957	7,093	1964	8,217	1971	5,542	1978	3,382
1944	5,114	1951	5,850	1958	7,540	1965	7,208	1972	5,860	1979	2,819
1945	5,302	1952	5,312	1959	7,086	1966	7,896	1973	5,794	1980	2,535
1946	5,583	1953	4,902	1960	7,971	1967	6,638	1974	5,643	1981	2,844

*Green asparagus only beginning in 1971.

GREEN ASPARAGUS PACKS BY SIZE OF CONTAINER

(Thousands of Actual Cases—Figures Rounded—Season beginning March 1 of Year Shown)

Units per case & Sz. of Cont.	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
24/8Z	299	248	190	(c)	(c)	(c)	(c)	240	163	191
48/1 Pic	405	312	265	348	298	313	(c)	(c)	(c)	(c)
24/300-300 cyl.	1,781	1,775	1,935	1,673	1,510	1,870	2,071	2,075	2,229	2,602
24/15z	114	145	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
6/5 Squat	113	76	(b)	(b)	(b)	(b)	50	(b)	(c)	(c)
6/10	178	104	127	159	219	217	36	54	103	101
Misc. T&G	19	13	16	261	238	149	595	446	458	507
Total Act. Cs	2,909	2,673	2,533	2,441	2,265	2,548	2,752	2,815	2,952	3,401
Total bas. 303's	2,819	2,535	2,844	2,727	2,549	2,928	3,097	3,154	3,361	3,846

(a) Included in 24/300. (b) Included in 6/10. (c) Included in Misc. (24/10½ & 12/12½-13).

GREEN ASPARAGUS PACKS BY STATE & STYLE

(Thousands of Actual Cases—Figures Rounded—Season Beginning March of Year Shown)

BY STATE	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
East	(a)	(a)	(a)	(a)	(a)	(a)	0	(a)	(a)	(a)
Illinois	318	(a)	(a)	(a)	(a)	(b)	(b)	(b)	(b)	(b)
Michigan	744	638	553	640	777	(b)	(b)	(b)	(b)	(b)
Midwest						1,137	1,054	1,131	1,516	1,304
Wash. & Ore.	1,302	1,253	1,377	1,355	1,146	(c)	(c)	(a)	(a)	(a)
California	(a)	(a)	(a)	(a)	(a)	(c)	(c)	(a)	(a)	(a)
West						1,392	1,698	(a)	(a)	(a)
Other	545	415	603	446	342	19	(b)	1,684	1,436	2,097
Total	2,909	2,673	2,533	2,441	2,265	2,548	2,752	2,815	2,952	3,401
BY STYLE										
Spears	n.a.	a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,444	1,659
Cuts & Bottoms	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,508	1,741

(a) In "Other". (b) In Midwest. (c) In West. n.a. Not available.

ASPARAGUS CARRYOVER—PACK—STOCK—SHIPMENTS

(Thousands of Actual Cases—Figures Rounded—Season Beginning Year Shown)

	1979	1980	1981	1982	1983	1984	1985	*1986	*1987	*1988
Carryover 3/1	1,026	1,093	707	594	797	685	673	885	795	1,011
Pack	2,909	2,673	2,533	2,441	2,265	2,548	2,752	3,199	3,342	3,764
Tot. Cner. Sup	3,935	3,766	3,240	3,036	3,063	3,233	3,425	4,084	4,137	4,775
CANNERS STOCKS										
Jan. 1	1,633	1,243	993	1,149	1,070	1,068	1,272	1,400	1,581	1,745
March 1	1,093	707	594	797	685	673	785	795	1,011	1,171
CANNER SHIPMENTS										
Mar. 1 to Jan. 1	2,302	2,523	2,248	1,887	1,993	2,165	2,153	2,684	2,556	3,030
Jan. 1 to Mar. 1	540	536	398	352	385	396	487	606	570	574
Mar. 1 to Mar. 1	2,842	3,059	2,646	2,238	2,378	2,561	2,640	3,290	3,126	3,604
EXPORTS**	176	188	205	112	99	89	65	58	69	150
GOV. PURCHASES**										
Armed Forces	19.1	26.8	.....	37.8	23.3	43.2	21.4	18.3	11.1	27.9
USDA										
Vet. Adm.	22.4	21.0	18.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

*Beginning 1986 data includes product packed in the No. 1 Picnic (211 x 400) reported on the basis of 24 cans per case. Prior years No. 1 Picnic reported basis 48 cans per case. **Basis 1,000 cases 24/303, season beginning year shown. Calendar year for exports. n.a. - Not available.

GREEN BEAN PACKS IN THE UNITED STATES

Source: National Food Processors Association. With Permission.

Thousands of Cases, basis 24 No. 303 Cans - Calendar Year.

1926	4,157	1935	7,358	1944	20,307	1953	23,902	1962	32,601	1971	45,213
1927	4,924	1936	6,924	1945	19,534	1954	29,137	1963	34,049	1972	44,383
1928	6,377	1937	10,591	1946	20,077	1955	25,521	1964	33,087	1973	50,887
1929	8,839	1938	1,111	1947	13,296	1956	25,598	1965	41,024	1974	57,971
1930	8,222	1939	8,953	1948	15,477	1957	27,292	1966	36,564	1975	51,466
1931	5,943	1940	10,406	1949	22,142	1958	29,118	1967	48,150	1976	44,027
1932	4,191	1941	14,241	1950	23,212	1959	27,473	1968	47,136	1977	50,952
1933	5,910	1942	26,374	1951	20,797	1960	29,292	1969	42,481	1978	53,229
1934	6,292	1943	25,203	1952	16,848	1961	36,107	1970	43,189	1979	62,624

GREEN BEAN PACKS BY REGION

(Thousands of Actual Cases. — Figures Rounded — Calendar Year thru 1985)

REGION*	1979	1980	1981	1982	1983	1984	1985	*1986	*1987	*1988
East	n.a.	n.a.	6,625	7,925	5,753	5,267	5,986	4,547	5,143	3,634
Midwest	n.a.	n.a.	26,059	25,559	25,263	28,613	31,704	27,948	33,819	27,485
South	n.a.	n.a.	5,088	3,021	3,423	4,343	3,590	(c)	(c)	(c)
West	n.a.	n.a.	7,467	5,940	5,910	6,192	6,392	10,284	10,535	10,130
Tot. actual cases	55,865	49,904	45,240	42,446	40,348	44,415	47,673	42,779	49,498	41,249
Tot. basis 303's	62,624	54,769	49,797	46,335	44,227	49,566	53,229	47,003	54,138	44,784

GREEN BEAN PACKS BY SIZE OF CONTAINER

(Thousands of Actual Cases—Figures Rounded—Calendar Year thru 1985)

Units per Case & Size of Cont.	1979	1980	1981	1982	1983	1984	1985	*1986	*1987	*1988
24/8Z	4,125	3,667	2,763	3,176	3,149	3,473	2,575	2,425	2,727	2,719
24/300-303	37,393	34,967	32,703	30,432	28,302	29,685	33,980	31,502	36,826	30,408
24/2½	967	709	1,092	(b)	440	(b)	(b)	(b)	(b)	(b)
6/10	12,928	9,787	8,120	7,665	8,134	9,935	10,402	8,001	8,847	6,983
Misc. Tin & Gl	454	775	561	1,173	323	1,321	1,015	852	1,098	1,140
Total	55,865	49,904	45,240	42,446	40,348	44,415	47,673	42,779	49,498	41,249

GREEN BEAN PACKS BY STYLE AND QUALITY

(Thousands of Actual Cases—Figures Rounded—Calendar Year thru 1986)

	1979	1980	1981	1982	1983	1984	1985	1986	*1987	*1988
Whole	2,672	2,035	1,537	1,889	1,318	1,750	1,972	1,346	1,709	1,461
Fr. Style	12,171	10,951	9,401	10,495	9,590	9,761	10,577	9,977	11,745	9,621
Fancy Cut	28,192	25,368	22,786	20,532	19,309	22,279	24,753	22,862	26,562	21,165
Ex. Std. Cut	9,076	8,539	8,986	6,633	7,452	7,979	8,053	6,260	7,555	7,263
Std. cut	3,754	3,011	2,530	2,898	2,679	2,645	2,317	2,252	1,926	1,739
Total	55,865	49,904	45,240	42,446	40,348	44,415	47,673	42,698	49,498	41,249

WAX BEAN PACKS IN THE UNITED STATES

Thousands of Cases, basis 24 No. 303 Cans. Calendar Year.

1926	769	1935	1,379	1944	1,893	1953	3,683	1962	4,265	1971	4,797
1927	780	1936	1,164	1945	1,651	1954	3,887	1963	3,618	1972	3,173
1928	1,206	1937	1,672	1946	2,300	1955	2,992	1964	3,745	1973	4,115
1929	1,562	1938	220	1947	2,675	1956	3,660	1965	4,603	1974	4,348
1930	1,844	1939	140	1948	3,035	1957	4,628	1966	3,972	1975	3,924
1931	1,459	1940	1,548	1949	3,047	1958	3,117	1967	5,023	1976	3,394
1932	717	1941	2,061	1950	2,358	1959	3,426	1968	4,706	1977	3,541
1933	839	1942	2,650	1951	2,920	1960	3,862	1969	4,858	1978	3,892
1934	1,395	1943	2,751	1952	3,094	1961	4,056	1970	4,382	1979	3,657

WAX BEAN PACKS BY REGION

(Thousands of Actual Cases.—Figures Rounded—Calendar Year thru 1985)

REGION*	1979	1980	1981	1982	1983	1984	1985	*1986	*1987	*1988
East	n.a.	n.a.	875	852	615	730	703	543	403	275
Midwest	n.a.	n.a.	1,608	1,088	1,110	1,282	1,037	889	1,185	542
South	n.a.	n.a.	0	215	160	145	194	183	n.a.	n.a.
West	n.a.	n.a.	166	(a)	(a)	(a)	(a)	(a)	n.a.	n.a.
Tot Actual Cses.	3,225	2,916	2,648	2,155	1,886	2,157	1,934	1,615	1,636	912
Tot Basis 303	3,657	3,284	3,012	2,496	2,279	2,523	2,274	1,935	1,943	1,071

*Seasonal packs 6/1 to 5/31 beginning year shown and therefore not strictly comparable with prior years.
 (a) Included in South. (b) Included in Misc. (c) Included in West. n.a. - Not available. * Preliminary.
 Represents pack from 6/1 to 11/1.

WAX BEAN PACKS BY SIZE OF CONTAINER

(Thousands of Actual Cases—Figures Rounded—Calendar Year thru 1985)

Units to Case & Size of Cont.	1979	1980	1981	1982	1983	1984	1985	*1986	*1987	1988
24/8Z	363	240	213	215	115	175	170	138	145	70
24/300-303	1,881	1,736	1,688	1,226	1,046	1,259	1,096	856	886	533
6/10	972	931	742	714	720	723	624	621	605	309
Misc. Tin & Gl.	10	9	5	.....	4	.....	44	.....	.....	.....
Total	3,225	2,916	2,648	2,155	1,885	2,157	1,934	1,615	1,636	912

WAX BEAN PACKS BY STYLE & QUALITY

(Thousands of Actual Cases—Figures Rounded—Calendar Year thru 1985)

	1979	1980	1981	1982	1983	1984	1985	*1986	*1987	1988
Whole	22	34	38	11	12	38	8	5	7	n.a.
Fr. Style	234	169	131	102	70	98	110	89	14	n.a.
Fancy Cut	2,119	1,771	1,686	1,403	1,044	1,313	1,277	1,022	1,189	638
Ex. Std. Cut	630	713	675	480	596	554	391	394	356	227
Std. Cut	221	229	118	159	164	153	148	104	70	35
Total	3,225	2,916	2,648	2,155	1,885	2,157	1,934	1,615	1,636	912

* Seasonal Packs 6/1 thru 5/31 beginning year shown and therefore not strictly comparable with prior years.

† Preliminary. Represents pack from 6/1 to 11/1. n.a. - Not available.

GREEN & WAX BEANS—CARRYOVER, PACK, STOCKS, SHIPMENTS

Source: National Food Processors Association. With Permission.

(Thousands of Actual Cases—Figures Rounded—Season beginning year shown)

Entire table revised with The 1988 Almanac to change carryover from 7/1 to 6/1.

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Carryover 6/1	7,477	11,687	14,222	12,543	9,952	5,724	7,220	11,268	7,045	8,231
Pack 6/1 to 11/1 ...	56,949	53,510	47,711	44,529	42,049	46,114	49,480	44,046	50,915	42,161
Pack 11/1 to 6/1 ...	912	600	176	73	401	369	.....	348	219	P
Pack 6/1 to 6/1 ...	57,861	54,110	47,887	44,602	42,450	46,483	49,480	44,394	51,134	P
Canner Supply ...	65,338	65,797	62,109	57,145	52,402	52,207	56,700	55,662	58,180	†50,392
CANNER SHIPMENTS										
6/1 to 11/1	22,085	20,990	19,216	17,989	20,254	18,548	18,728	20,667	19,803	19,223
November										4,448
December	7,238	8,290	8,169	8,465	7,142	6,929	7,662	7,904	8,687	3,532
January	5,364	4,361	4,950	4,414	4,454	4,772	4,140	5,478	5,116	6,445
February	4,700	5,029	4,101	4,195	4,258	4,308	3,758	4,042	5,108	3,972
March	4,578	4,498	4,970	4,207	3,459	3,794	3,991	3,676	4,441	3,438
April	(a)	4,009	3,649	3,666	3,475	3,212	3,391	3,455	3,513	2,512
May	9,685	4,396	4,601	4,168	3,636	3,424	3,763	3,394	3,278	P
6/1 to 6/1	53,651	51,575	49,656	47,103	46,678	44,987	45,432	48,617	49,948	P
CANNER STOCKS*										
November 1	42,341	44,207	42,717	38,993	31,747	33,290	37,972	34,647	38,157	31,169
December 1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	26,721
January 1	35,103	35,917	34,548	30,528	24,605	26,361	30,310	26,743	29,470	23,189
February 1	29,739	31,555	29,597	26,114	20,151	21,589	26,170	21,264	24,353	16,743
March 1	25,039	26,526	25,497	21,919	15,893	17,281	22,412	17,222	19,246	12,771
April 1	20,460	22,028	20,526	17,712	12,434	13,487	18,421	13,547	14,804	9,333
May 1	n.a.	18,018	16,878	14,047	8,959	10,275	15,031	10,092	11,291	6,821
June 1	11,687	14,222	12,453	9,952	5,724	7,220	11,268	7,045	8,231	P
EXPORTS**	890	809	876	1,047	651	663	635	718	597	692
GOV. PURCHASES**										
Armed Forces.	367.0	450.7	340.4	357.7	421.7	263.9	399.3	233.1	305.5	154.2
USDA	1,289.4	966.9	1,121.9	1,096.9	913.8	1,099.1	882	988.7	838.1	42.0
Vet. Adm.	80.4	69.5	72.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

* Figures reflect Spring pack as reported.
n.a. - Not available. (a) Included in May.
year for Exports.

† Supply to 3/1/89.

P - Not available at press time 5/15/89.

** Basis 1,000 24/303. Season beginning year shown. Calendar

FRESH LIMA BEAN PACKS IN THE UNITED STATES

Source: National Food Processors Association. With Permission.

Thousands of Cases, basis No. 303 Cans. To convert to 2's, multiply by .822

1934 1,609	1942..... 3,083	1950..... 3,940	1958..... 3,005	1966..... 3,531	1974..... 2,523
1935 1,447	1943..... 2,292	1951..... 3,599	1959..... 3,282	1967..... 3,963	1975..... 3,729
1936 1,892	1944..... 2,009	1952..... 2,826	1960..... 2,754	1968..... 3,818	1976..... 2,812
1937 1,845	1945..... 1,928	1953..... 3,764	1961..... 4,250	1969..... 3,596	1977..... 2,657
1938 2,343	1946..... 2,131	1954..... 4,294	1962..... 3,615	1970..... 2,776	1978..... 3,356
1939 2,441	1947..... 2,689	1955..... 3,424	1963..... 3,089	1971..... 3,116	1979..... 3,061
1940 2,430	1948..... 3,021	1956..... 4,142	1964..... 2,213	1972..... 2,116	1980..... 2,833
1941 2,912	1949..... 5,332	1957..... 3,071	1965..... 2,981	1973..... 3,150	1981..... 2,602

FRESH LIMA BEAN PACKS BY SIZE OF CONTAINER AND REGION*

(Thousands of Actual Cases—Figures Rounded, Season beginning Year Shown)

Units to Case & Size of Container	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
24/8Z	530	621	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
24/300-303	1,975	1,791	1,711	1,356	1,349	1,454	1,221	1,150	842	815
6/10	502	445	398	452	468	412	324	248	185	180
Misc. Tin & Gl		2	478	351	438	375	424	352	359	311
East ¹	655	652	571	593	(a)	(a)	(a)	(a)	(a)	(a)
Midwest	(a)	(a)	(a)	615	382	526	523	486	497	347
Other	2,352	2,205	2,016	952	1,873	1,715	1,446	1,265	889	959
Tot. Act. Cs.	3,007	2,858	2,587	2,160	2,255	2,241	1,969	1,751	1,386	1,306
Tot. 24/303	3,061	2,833	2,602	2,275	2,338	2,316	1,966	1,738	1,329	1,267

* Regional figures revised in 1985 Almanac. ¹Del., Md., N.Y., Pa. thru 1981. For description of all regions 1982 and after see Regional Definitions in box at beginning of this Section VIII.

FRESH LIMA BEAN PACKS BY STYLE

(Thousands of Actual Cases—Figures Rounded, Season Beginning Year Shown)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Green Limas	— Data discontinued in 1984 —									
Midget & Tiny ..	206	133	185	228	187	170	222	209	192	n.a.
Small	609	484	422	551	497	469	446	452	412	n.a.
Medium	584	521	486	327	432	477	474	465	484	n.a.
Mixed	1,937	1,368	1,374	1,939	1,493	1,447	1,265	891	1,100	n.a.
Green & White ..	51	133	41	70	192	192	65	70	66	n.a.
Fordhooks	215	172	161	182	205	102	114	72	0	n.a.
Total	3,631	2,811	2,669	3,298	3,007	2,858	2,587	2,160	2,255	2,241

LIMA BEANS CARRYOVER—PACK—STOCKS—SHIPMENTS

(Thousands of Actual Cases—Figures Rounded, Season beginning year shown)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Carryover 6/1....	819	869	841	852	537	474	536	654	714	462
Pack	3,007	2,858	2,587	2,160	2,255	2,241	1,969	1,751	1,386	1,306
Canner Supply ...	3,826	3,727	3,428	3,012	2,792	2,715	2,505	2,404	2,099	1,768
CANNER SHIPMENTS										
June 1 to Nov. 1 ...	1,388	1,239	1,031	1,003	1,017	931	751	762	649	n.p.
Nov. 1 to Jan. 1 ...	424	422	424	488	397	341	323	212	211	n.p.
Jan. 1 to Mar. 1 ...	1,146	1,224	1,121	983	905	476	361	336	362	n.p.
Mar. 1 to June 1 ...	2,958	2,885	2,576	2,474	2,319	430	416	381	416	P
June 1 to June 1 ...						2,178	1,851	1,691	1,638	P
CANNER STOCKS										
November 1	2,439	2,487	2,396	2,008	1,775	1,784	1,754	1,642	1,450	n.p.
January 1	2,015	2,065	1,973	1,520	1,379	1,442	1,431	1,430	1,239	n.p.
March 1	n.a.	n.a.	n.a.	n.a.	n.a.	966	1,070	1,095	878	n.p.
April 1	1,289	1,244	1,234	882	794	822	927	985	711	n.p.
June 1	869	841	852	537	474	536	654	714	462	P
GOV. PURCHASES**										
Armed Forces....	74.8	91.5	91.9	72.7	81.7	55.1	73.1	32.5	37.0	73.5
U.S.D.A.	0				28.5	21.4	25.0	7.5	n.a.	n.a.
Vet. Admin.	10.0	6.4	7.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

**Basis 1,000 cases 24/303's, Pack year. P - Not available at press time. n.a. - Not available.
(a) Included in Misc. or Other. n.p. - Not published in order to avoid possible disclosure of individual operations.

BEET PACKS IN THE UNITED STATES*

Source: National Food Processors Association. With Permission.

Thousands of Cases, basis 24 No. 303 Cans. To convert to 2's, multiply by .822

1909.....264	1930.....3,566	1940.....4,538	1950.....9,947	1960.....8,847	1970.....11,310
1914.....525	1931.....1,969	1941.....8,986	1951.....9,189	1961.....10,646	1971.....10,430
1919.....1,219	1932.....1,274	1942.....8,181	1952.....8,165	1962.....12,594	1972.....10,025
1921.....815	1933.....1,483	1943.....7,392	1953.....10,471	1963.....12,665	1973.....10,881
1923.....1,136	1934.....2,679	1944.....9,624	1954.....8,615	1964.....10,709	1974.....15,084
1925.....2,532	1935.....3,003	1945.....11,162	1955.....9,198	1965.....10,007	1975.....13,130
1926.....1,505	1936.....3,038	1946.....8,593	1956.....11,822	1966.....11,382	1976.....9,201
1927.....1,378	1937.....3,917	1947.....4,126	1957.....10,194	1967.....11,785	1977.....11,289
1928.....1,578	1938.....3,875	1948.....5,421	1958.....9,598	1968.....14,597	1978.....12,973
1929.....2,445	1939.....2,771	1949.....8,955	1959.....9,651	1969.....11,339	1979.....15,103

BEET PACKS BY REGION*

Thousands of Actual Cases. Figures Rounded—Season beginning July 1

REGION	1979	1980	1981	1982	1983	1984	1985	1986	1987	+1988
East ¹	4,317	3,561	3,136	3,524	(b)	(b)	(b)	(b)	(b)	P
Midwest ²	6,714	4,710	3,885	4,898	4,307	4,263	3,835	4,614	6,502	P
South.....			(a)	(a)	(a)	(a)	(a)	(a)	(a)	P
West ³	3,137	2,154	2,088	1,814	3,857	4,240	4,872	3,995	4,679	P
Tot. Act. Cs.	14,168	10,425	9,110	10,236	8,163	8,503	8,707	8,609	11,181	+7,689
Tot. 24/303	15,103	10,878	9,657	10,868	9,039	9,292	9,386	9,042	12,127	+8,257

BEET PACKS BY SIZE OF CONTAINER AND STYLE*

Thousands of Actual Cases—Figures Rounded—Season beginning July 1

Units per Case & Size of Container	1979	1980	1981	1982	1983	1984	1985	1986	1987	+1988
24/8 oz.....	1,417	1,000	1,052	1,199	787	893	986	1,028	1,148	P
12/16 oz.....	2,331	1,637	1,415	1,313	1,019	1,377	1,255	1,420	1,619	P
24/300-303	5,923	4,971	3,811	4,723	3,523	3,169	3,603	3,529	4,723	P
6/10.....	4,497	2,817	2,832	3,001	2,834	3,064	2,863	2,633	3,692	P
Misc. Tin & Gl. ..										P
Total	14,168	10,425	9,110	10,236	8,163	8,503	8,707	8,609	11,181	+7,689
BY STYLE										
Whole	1,978	1,594	1,355	1,515	1,264	1,130	1,205	1,304	1,403	P
Cuts & Sections ..	1,514	927	649	670	437	547	625	520	831	P
Sliced & Salad....	8,595	6,616	5,601	6,773	5,573	5,868	5,773	5,856	7,570	P
Diced	1,120	813	879	757	563	567	639	558	810	P
French Style	798	382	535	427	269	331	374	246	359	P
Irreg. Pieces	162	93	91	93	57	59	91	126	207	P

CARROT PACKS IN THE UNITED STATES

Source: National Food Processors Association. With Permission.

Thousands of Cases, basis 24 No. 303 Cans. Season beginning March 1 of year stated, July 1 beginning 1965

1931.....303	1942.....2,785	1950.....2,280	1958.....3,858	1966.....7,064	1974.....6,914
1933.....734	1943.....2,908	1951.....2,656	1959.....3,504	1967.....5,546	1975.....4,717
1935.....1,129	1944.....3,820	1952.....3,382	1960.....5,043	1968.....5,122	1976.....5,221
1937.....1,158	1945.....4,939	1953.....3,351	1961.....3,939	1969.....5,463	1977.....6,586
1938.....858	1946.....4,572	1954.....2,557	1962.....5,085	1970.....5,388	1978.....6,250
1939.....1,476	1947.....1,191	1955.....2,237	1963.....5,100	1971.....5,310	1979.....7,267
1940.....1,751	1948.....3,738	1956.....3,752	1964.....4,471	1972.....5,529	1980.....4,365
1941.....2,511	1949.....2,184	1957.....2,912	1965.....4,516	1973.....6,391	1981.....5,251

CARROT PACKS BY REGION

Thousands of Actual Cases. Figures Rounded—Season Beginning July 1

REGION	1979	1980	1981	1982	1983	1984	1985	1986	1987	**1988
East ¹	1,307	828	1,093	992	(b)	(b)	n.a.	n.a.	n.a.	P
Midwest ²	3,511	2,410	2,515	3,028	2,156	2,296	2,393	2,308	2,909	P
South.....	(a)	(a)	(a)	(a)	539	735	n.a.	n.a.	n.a.	P
West ³	1,531	545	913	1,082	1,344	1,399	n.a.	n.a.	n.a.	P
Tot. Act. Cs.	6,349	3,783	4,522	5,102	4,039	4,431	3,892	3,756	4,470	**3,214
Tot. 24/303	7,267	4,365	5,251	5,932	4,695	5,100	4,486	4,344	5,196	**3,715

* Beet packs include pickled, spiced and harvard. ¹Del., N.Y., Pa. thru 1980. ²Ind., Mich., Tex., Wis. thru 1980. ³Cal., Col., Ore., Utah, Wash. thru 1980. All figures 1981 and thereafter comply with NFPA "Regional Definitions" at beginning of this Section VIII. (a) In Midwest. (b) In West. n.a. - Not available. † Pack to April 1, 1989. P - Not available at press time. ** Pack to January 1, 1989.

CARROT PACKS BY SIZE OF CONTAINER AND STYLE

Thousands of Actual Cases—Figures Rounded—Season beginning July 1

	1979	1980	1981	1982	1983	1984	1985	1986	1987	**1988
24 8 oz	913	428	590	680	(a)	546	474	428	524	P
24/303 & 300	3,239	2,088	2,302	2,561	2,050	2,384	2,098	2,052	2,373	P
6/10	2,196	1,267	1,630	1,861	1,451	1,500	1,321	1,276	1,573	P
Misc.			281		538					P
Total	6,349	3,783	4,522	5,102	4,039	4,431	3,892	3,756	4,470	**3,214
BY STYLE										
Whole	752	510	514	504	n.a.	805	458	441	563	P
Cut & Sections ..	66	25	10	22	n.a.	17	18	n.a.	n.a.	P
Sliced	4,425	2,695	3,102	3,716	n.a.	2,887	2,714	2,752	3,296	P
Diced	1,008	490	779	(a)	n.a.	637	553	499	534	P
Shoestring	71	50	102	77	n.a.	46	84	42	n.a.	P
Irreg. Pieces	26	12	14	782	n.a.	39	65	n.a.	19	P

(a) Included in "Misc." or "Irreg. Pieces".

n.a. - Not available.

P - Not available at press time.

**Pack to January 1, 1989.

CORN PACKS IN THE UNITED STATES

Source: National Food Processors Association. With Permission.

Thousands of Cases, basis 24 No. 303 Cans. To convert to 2's, multiply by .822

1905.... 15,883	1917.... 13,180	1929.... 21,334	1941.... 31,853	1953.... 37,798	1965.... 39,116
1906.... 11,147	1918.... 14,301	1930.... 19,144	1942.... 39,184	1954.... 37,355	1966.... 45,525
1907.... 8,118	1919.... 16,531	1931.... 23,686	1943.... 35,081	1955.... 29,372	1967.... 49,268
1908.... 8,276	1920.... 18,349	1932.... 11,416	1944.... 30,609	1956.... 43,515	1968.... 59,278
1909.... 7,060	1921.... 10,788	1933.... 12,435	1945.... 34,450	1957.... 36,455	1969.... 49,387
1910.... 12,277	1922.... 13,931	1934.... 13,747	1946.... 37,760	1958.... 33,019	1970.... 46,996
1911.... 17,447	1923.... 17,209	1935.... 26,195	1947.... 31,829	1959.... 41,232	1971.... 53,757
1912.... 15,993	1924.... 14,800	1936.... 17,838	1948.... 38,409	1960.... 35,276	1972.... 52,957
1913.... 8,885	1925.... 29,670	1937.... 28,720	1949.... 36,350	1961.... 46,167	1973.... 55,228
1914.... 11,943	1926.... 23,264	1938.... 24,973	1950.... 22,254	1962.... 45,744	1974.... 46,430
1915.... 12,351	1927.... 12,623	1939.... 17,772	1951.... 31,203	1963.... 44,152	1975.... 57,458
1916.... 11,139	1928.... 17,686	1940.... 18,939	1952.... 39,441	1964.... 37,551	1976.... 54,694
					1977.... 56,300
					1978.... 57,907

CORN PACKS BY AREA*

Thousands of Actual Cases, figures rounded.

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
East†	2,775	2,373	2,586	3,122	2,858	3,062	2,430	2,304	2,713	1,935
Midwest†	45,200	38,256	45,096	45,137	39,788	45,810	47,292	44,209	46,196	37,790
West†	10,861	9,627	9,879	11,197	8,173	7,330	5,468	8,194	10,131	10,859
Total Golden	58,836	50,256	57,561	59,456	50,818	56,202	55,190	54,707	59,041	50,584
Total White	1,343	743	839	1,026	540	1,079	1,061	888	988	913
Tot Pack A/C	60,179	51,000	58,400	60,482	51,359	57,281	56,252	55,595	60,029	51,498
Tot Basis 24/303...	60,022	50,574	57,949	60,522	51,595	56,879	55,729	55,090	59,177	50,831
Tot Basis 24/2 ...	49,218	41,572	47,634	49,749	42,411	46,755	45,809	45,284	48,643	41,783

† Golden only. * Revised with 1982 Almanac. No breakouts by 303 nor of white available since 1977. Report does not include field corn, corn on the cob, nor succotash. See definition of Regions beginning of this Section VIII.

CORN PACKS BY SIZE OF CONTAINER†

(Thousand of Actual Cases—Figures Rounded)

Size of Container	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
24/8z Sh & Tl	6,241	5,251	5,723	6,884	4,708	5,524	5,089	4,519	5,064	4,883
24/12z Vac (b) ...	(a)	(a)	(a)	(a)	8,415	(a)	(a)	(a)	(a)	(a)
24/303 & 300	37,043	31,836	37,777	36,910	32,315	35,915	35,847	37,295	39,948	33,287
6/10*	6,686	5,158	5,608	7,271	5,780	6,783	6,175	5,787	6,014	5,658
Misc.	10,209	8,754	9,292	9,417	141	9,069	9,141	7,994	9,003	7,670
Total	60,179	51,000	58,400	60,482	51,359	57,281	56,252	55,595	60,029	51,498

† White and Golden. includes 24/2 vac.

* Includes 6/75z (603x600).

(a) Included with misc.

(b) Beginning 1983

CORN PACK BY QUALITY AND STYLE

(Thousands of Actual Cases—Figures Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
GOLDEN										
Whole Kernel										
Fancy	34,191	30,079	35,277	37,469	30,321	34,541	34,821	34,863	37,668	31,537
Ex. Std.	6,953	6,210	5,893	6,266	7,356	5,967	6,195	5,598	6,925	5,811
Standard	966	814	716	725	776	1,042	513	530	436	468
Total	42,110	37,103	41,886	44,460	38,454	41,549	41,529	40,991	45,029	37,816
Cream Style										
Fancy	14,270	11,328	13,892	13,343	10,424	13,335	12,271	12,414	12,987	11,478
Ex. Std.	2,119	1,665	1,672	1,440	1,731	1,240	1,311	1,209	955	1,232
Standard	337	160	111	213	210	77	79	93	70	59
Total	16,726	13,154	15,675	14,996	12,364	14,652	13,661	13,716	14,012	12,769
WHITE										
Whole Kernel										
Fancy	n.a.	n.a.	n.a.	673	368	†1,042	717	n.a.	n.a.	n.a.
Ex. Std.	n.a.	n.a.	n.a.	3	15	†30	n.a.	n.a.	n.a.	n.a.
Standard	n.a.	n.a.	n.a.	3	1	†7	n.a.	n.a.	n.a.	n.a.
Total	873	n.a.	n.a.	679	385	674	726	731	n.a.	n.a.
Cream Style										
Fancy	n.a.	n.a.	n.a.	347	152	*	334	n.a.	n.a.	n.a.
Ex. Std.	n.a.	n.a.	n.a.	.....	4	*	n.a.	n.a.	n.a.	n.a.
Standard	n.a.	n.a.	n.a.	(a)	0	*	n.a.	n.a.	n.a.	n.a.
Total	470	n.a.	n.a.	348	156	405	335	157	n.a.	n.a.
Total All	60,179	51,000	58,400	60,482	51,359	57,281	56,252	55,595	60,029	51,498
Total Fancy	n.a.	n.a.	n.a.	51,832	41,265	48,918	48,143	48,140	n.a.	n.a.
Total Ex. Std.	n.a.	n.a.	n.a.	7,709	9,107	7,237	7,510	6,829	n.a.	n.a.
Total Std.	n.a.	n.a.	n.a.	941	987	1,126	598	626	n.a.	n.a.
Total W.K.	42,983	n.a.	n.a.	45,139	38,838	42,223	42,255	41,722	n.a.	n.a.
Total C.S.	17,197	n.a.	n.a.	15,344	12,521	15,057	13,996	13,873	n.a.	n.a.
Total White	1,343	743	839	1,026	541	1,079	1,061	888	988	913
Total Golden	58,836	50,256	57,561	59,456	50,818	56,201	55,190	54,707	59,041	50,584

n.a.—Not available.
kernel pack.

(a) Less than 500 cases.

† Includes white cream style.

* Included in white whole

**See Details Regarding
The 12th Edition (1988-89) of
THE DIRECTORY
of the Canning, Freezing, Preserving Industries
at Page 5 of this Almanac**

SWEET CORN—CARRYOVER, PACK, STOCKS, SHIPMENTS

(Thousands of Actual Cases—Figures Rounded, Season beginning year shown)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Carryover 7/1....	10,188	9,966	5,189	7,731	11,492	8,464	11,261	9,480	6,791	5,865
Pack.....	60,179	51,000	58,400	60,482	51,359	57,281	56,252	55,595	60,029	51,498
Canner Supply....	70,367	60,966	63,589	68,214	62,851	65,745	67,513	65,075	66,820	57,363
CANNER SHIPMENTS										
July 1 to Nov. 1....	18,348	18,685	16,400	18,421	21,120	17,578	19,695	21,609	20,032	18,701
November.....	5,116	5,031	5,601	4,697	4,110	4,366	5,220	5,691	6,029	4,516
December.....	5,249	5,079	5,240	5,102	4,153	4,246	4,345	4,623	4,365	4,123
January.....	6,032	5,226	5,194	4,821	5,066	6,023	6,367	6,620	5,692	7,170
February.....	5,742	5,270	5,615	4,933	4,389	5,233	5,578	5,048	6,135	5,367
March.....	5,658	6,610	5,806	5,678	4,108	4,963	5,297	4,543	5,726	3,600
April.....	(a)	4,528	4,508	4,448	4,566	3,975	4,145	4,272	4,229	3,125
May.....	10,827	3,619	4,922	5,132	4,168	4,458	4,539	3,443	4,271	P
June.....	3,429	1,729	2,571	3,488	2,709	3,143	2,847	2,433	4,476	P
July 1 to July 1....	60,401	55,777	55,858	56,721	54,389	54,484	58,033	58,284	60,955	P
CANNER STOCKS										
November 1.....	52,020	42,281	47,189	49,792	41,731	48,168	47,818	43,466	46,788	38,662
December 1.....	46,903	37,250	41,588	45,095	37,622	43,302	42,598	37,775	40,759	34,146
January 1.....	41,655	32,171	36,348	39,993	33,469	39,056	38,253	33,152	36,394	30,023
February 1.....	35,623	26,945	31,154	35,172	28,403	33,033	31,886	26,532	30,702	22,853
March 1.....	29,881	21,676	25,539	30,239	24,014	27,800	26,308	21,483	24,567	17,486
April 1.....	24,222	15,065	19,732	24,561	19,906	22,837	21,011	16,940	18,841	13,886
May 1.....	n.a.	10,538	15,224	20,113	15,340	18,862	16,866	12,668	14,612	10,761
June 1.....	13,395	6,918	10,302	14,981	11,171	14,405	12,327	9,224	10,340	P
July 1.....	9,966	5,189	7,731	11,492	8,464	11,261	9,480	6,791	5,865	P
EXPORTS**.....	4,394	5,105	6,543	5,716	6,065	5,257	5,608	-7,037	8,351	10,600
GOV. PURCHASES**										
Armed Forces....	465.1	402.2	488.2	389.9	278.1	423.7	263.2	357.5	420.4	462.9
U.S.D.A.....	2,087.5 ¹	972.5	61.2	464.3	735.9	1,146.4	1,389.7	920.0	658.8	63.0
Vet Adm.....	46.1	55.9	144.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

(a) Included in May. n.a.—Not available. P—Not available at press time. **Basis 1,000 cases 24/303, season beginning year shown. Calendar year for Exports. ¹Estimated requirements.

GREEN PEA PACKS IN THE UNITED STATES

Compiled by Economics & Statistics Div., Nat'l Food Processors Assn.

Thousands of Cases, basis 24 No. 303 Cans.

1899....3,130	1918....13,497	1930....26,883	1942....42,012	1954....29,220	1966....31,856
1904....5,727	1919....10,596	1931....16,209	1943....42,763	1955....33,399	1967....37,692
1908....6,804	1920....15,027	1932....12,648	1944....38,460	1956....35,682	1968....36,231
1909....6,134	1921....10,013	1933....15,729	1945....48,372	1957....41,290	1969....32,071
1910....5,303	1922....15,911	1934....19,205	1946....49,938	1958....36,035	1970....28,697
1911....5,529	1923....17,017	1935....30,132	1947....40,405	1959....31,309	1971....33,197
1912....8,915	1924....23,564	1936....20,194	1948....28,494	1960....28,714	1972....33,081
1913....10,699	1925....21,736	1937....28,630	1949....28,631	1961....32,399	1973....29,558
1914....10,793	1926....21,605	1938....31,059	1950....35,479	1962....33,725	1974....33,120
1915....11,312	1927....15,782	1939....19,610	1951....41,378	1963....33,588	1975....35,172
1916....8,157	1928....21,895	1940....30,739	1952....32,342	1964....30,045	1976....31,927
1917....11,991	1929....22,607	1941....35,043	1953....34,206	1965....37,585	1977....30,238
					1978....25,269

GREEN PEA PACKS BY REGION* AND VARIETY

SWEET & ALSWEET*	(Thousands of Actual* Cases)									
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
East.....	1,994	5,376	2,113	2,571	2,202	2,885	3,194	2,189	2,558	2,517
Mid-West.....	23,668	18,533	16,435	16,217	13,959	16,023	25,865	18,869	20,655	10,174
West.....	2,922	**	2,786	**	**	**	**	**	**	**
Tot. Sweet.....	28,584	23,909	21,284	18,788	16,161	18,908	n.a.	n.a.	n.a.	n.a.
Tot. Alaska....	7,648	6,208	6,648	5,728	4,401	4,367	n.a.	n.a.	n.a.	n.a.
Tot. Actual Cs....	36,232	30,117	27,932	24,516	20,562	23,276	29,059	21,068	23,213	12,691
Tot. basis 303's...	36,492	30,056	27,296	24,790	20,827	23,312	29,306	20,919	23,057	12,494
Tot. basis 2's....	29,996	24,706	22,437	20,377	17,120	19,162	24,090	17,195	18,953	10,270

*Table revised 1985 Almanac. All regional figures in Actual Cases and include Alaska beginning 1985. See NFPA Regional Definitions at beginning of this Section VIII. **Included in East.

GREEN PEA PACKS BY SIZE OF CONTAINER & QUALITY

(Thousands of Actual Cases—Figures Rounded)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
QUALITY BY CONTAINER SIZE—all varieties										
24/8Z Total	5,360	5,074	4,472	3,390	2,824	3,459	4,169	2,894	2,934	1,977
Fancy	5,049	4,827	4,194	3,213	2,694	3,324	3,708	2,788	2,843	1,784
Ex. Std.	269	232	255	148	106	120	189	93	160	161
Std.	42	15	24	29	24	14	36	13	14	20
24/300-303 Tot	26,259	21,172	20,990	17,992	15,102	17,057	21,240	16,126	18,237	9,489
Fancy	18,338	14,317	14,174	11,736	10,643	12,279	15,493	11,713	13,976	7,038
Ex. Std.	6,588	6,038	5,901	5,709	4,012	4,339	5,205	4,177	4,096	2,201
Std.	1,334	818	915	546	446	439	542	236	164	250
6/10 Tot.	4,612	3,870	2,470	3,085	2,628	2,758	3,650	2,037	2,041	1,225
Fancy	1,344	958	803	925	908	917	1,256	983	755	378
Ex. Std.	2,781	2,511	1,443	1,928	1,594	1,757	1,804	995	1,245	1,516
Std.	487	401	225	232	126	84	157	59	41	189
Total All.	36,232	30,117	27,932	24,516	20,562	23,276	29,059	21,058	23,213	12,691
Tot. Fancy*	24,730	20,102	19,170	15,924	14,252	16,522	20,458	15,484	17,575	9,200
Tot. Ex. Std.*	9,639	8,781	7,599	7,785	5,712	6,216	7,646	5,265	5,427	3,121
Tot. Std.*	1,863	1,234	1,163	807	598	537	955	308	211	370

*May include small pack of misc. tin and glass sizes not included in above container size breakdown.

¹Midwest only.

GREEN PEA PACKS BY VARIETY, QUALITY & SIEVE SIZE

	1979	1980	1981	1982	1983	1984	(a)1985	(a)1986	(a)1987	(a)1988
QUALITY BY VARIETY (Thousands of Actual Cases—Figures Rounded)										
ALASKA										
Fancy	5,011	4,332	4,779	3,942	2,827	3,346	n.a.	n.a.	n.a.	n.a.
Ex. Std.	2,179	1,704	1,697	1,616	1,445	960	n.a.	n.a.	n.a.	n.a.
Std.	458	172	172	171	130	61	n.a.	n.a.	n.a.	n.a.
Total Alaska ...	7,648	6,208	6,648	5,728	4,401	4,367	n.a.	n.a.	n.a.	n.a.
SWEET										
Fancy	19,719	15,770	14,391	11,982	11,425	13,176	n.a.	n.a.	n.a.	n.a.
Ex. Std.	7,460	7,077	5,902	6,170	4,267	5,256	n.a.	n.a.	n.a.	n.a.
Std.	1,405	1,062	991	636	468	476	n.a.	n.a.	n.a.	n.a.
Total Sweet.	28,584	23,910	21,284	18,788	16,161	18,908	n.a.	n.a.	n.a.	n.a.
SIEVE SIZE BY VARIETY										
ALASKA										
1 Sieve	91	84	167	214	218	(a)	(a)	(a)	(a)	(a)
2 Sieve	3,433	3,042	3,748	2,524	1,939	(a)	(a)	(a)	(a)	(a)
3 Sieve	2,664	1,976	1,451	1,680	954	(a)	(a)	(a)	(a)	(a)
4 Sieve & Up.	1,442	1,056	1,049	1,076	1,181	(a)	(a)	(a)	(a)	(a)
Mixed	17	50	233	233	109	(a)	(a)	(a)	(a)	(a)
SWEET & ALSW.										
1 and 2 Sieve ...	1,668	1,077	1,288	2,712	1,118	1,465	6,246	5,155	n.a.	2,744
3 Sieve	1,461	1,318	1,094	1,024	894	1,152	2,924	1,856	1,708	1,190
4 Sieve	2,432	2,206	1,830	1,913	1,868	2,177	(b)5,402	2,249	2,957	1,159
5 Sieve & Up.	1,360	1,943	1,773	1,171	672	1,252	(b)	901	n.a.	389
Mixed	21,662	17,366	15,299	11,968	11,610	12,863	14,487	10,896	12,921	7,210

(a) Alaska included with sweet & alswet.

(b) 5 sieve & up included with 4 sieve.

n.a. - Not available.

Food Production/Management



Keeping The Industry Informed Since 1878

Annual Subscription \$25.00

CTI PUBLICATIONS, INC.

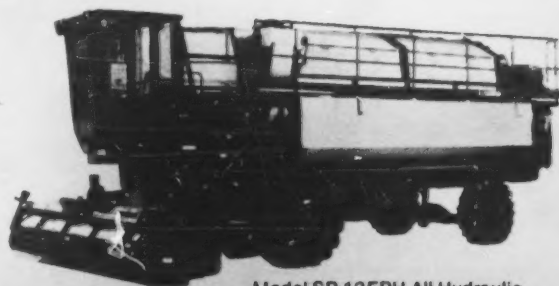
2619 Maryland Ave. • Baltimore, Md. 21218 USA

Publishers of A Complete Course in Canning & Total Quality Assurance For The Food Industries

HAMACHEK MACHINE COMPANY



Sweet Corn
Husker



Model SP-12EPH All Hydraulic

IF YOU PROCESS

Oranges, Grapefruit, Sweet Corn, Green Peas, Baby Lima Beans, Fordhook Lima Beans, Southern Peas, Dry Beans (of all kinds), Asparagus, Cauliflower, Broccoli, Spinach, Green Leafy Vegetables, Cabbage, Sweet Peppers, Hot Peppers, Pumpkin, Squash, Cucumbers, Cherries, Apples, Pears, Plums, Apricots, Peaches, Blueberries, Cranberries, Green Beans, Stews, Soups, Pasta, Tray Pack Meals, Salad Vegetables, Onions, Potatoes, Sweet Potatoes, Red Beets, Carrots, Edible Nuts, Seed Corn.

HAMACHEK CAN HELP

Manufacturers of:

Green Pea & Lima Bean Stripper Combines

Sweet Corn Huskers

Seed Corn Huskers

Citrus Fruit De-Stemmers

Green Bean Cleaners

Unhusked Corn Cleaners

Cleaning Reels

Automatic Feed Hoppers

Product Receiving Systems

Metering Conveyors

Dewatering & Air Cleaner Units

Steam Blanchers

Product Coolers, Air

Product Coolers, Water

Water Chilling Systems

Dewatering Screens

Air Assisted Dewaterers

Freezer Belt Spreaders

Storage Tanks

Live Bottom Storage Bins

FRANK FH
HAMACHEK
MACHINE COMPANY

Established 1880
Incorporated 1924

Engineers • Designers • Manufacturers

DIVISION OF H&K MACHINE CO. INC.

Kewaunee, Wisconsin 54216

Phone 414/388-2340

FAX 414/388-0332

CANNED GREEN PEAS CARRYOVER—PACK—STOCKS—SHIPMENTS

(Thousands of Actual Cases—Figures Rounded—Season beginning year shown)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Carryover June 1	1,787	6,095	5,979	6,178	3,530	1,806	3,251	7,281	4,474	4,017
Pack	36,232	30,117	27,932	24,516	20,562	23,276	29,059	21,058	23,213	12,691
Canner Supply ...	38,019	36,212	33,911	30,694	24,093	25,082	32,310	28,338	27,687	16,708
CANNER SHIPMENTS										
6/1 to 9/1	8,057	6,152	4,859	5,110	5,362	5,551	5,458	5,061	5,070	
September	2,927	2,828	2,892	2,889	2,988	2,269	2,195	2,649	2,314	} 8,423
October	2,723	2,958	2,504	2,753	2,401	2,510	3,034	2,892	2,424	
November	2,717	2,908	2,745	2,789	1,848	2,321	1,693	2,401	2,618	1,493
December	2,400	2,671	2,525	2,288	1,559	1,214	2,541	1,816	2,024	1,174
January	2,665	2,424	2,254	2,298	2,256	2,044	2,461	2,613	2,093	1,386
February	2,524	2,369	2,520	2,485	2,167	2,014	1,836	1,884	1,993	964
March	2,768	2,862	2,639	2,427	1,409	1,472	2,071	1,704	2,184	1,009
April	(a)	2,326	2,356	2,058	1,244	1,216	1,938	1,615	1,376	757
May	5,134	3,003	2,439	2,067	1,052	1,220	1,800	1,228	1,572	P
6/1 to 6/1	31,924	30,233	27,733	27,164	22,286	21,831	25,029	23,864	23,670	P
CANNER STOCKS										
September 1	29,962	30,060	29,052	25,584	18,731	19,531	26,852	23,277	22,617	n.a.
October 1	27,035	27,232	26,160	22,696	15,743	17,262	24,657	20,628	20,303	n.a.
November 1	24,311	24,273	23,656	19,943	13,342	14,752	21,620	17,736	17,878	8,284
December 1	21,594	21,365	20,911	17,153	11,494	12,431	19,927	15,335	15,260	6,791
January 1	19,186	18,694	18,386	14,865	9,935	11,217	17,386	13,519	13,236	5,617
February 1	16,521	16,539	16,132	12,568	7,678	9,172	14,924	10,905	11,142	4,258
March 1	13,997	14,170	13,612	10,082	5,511	7,159	13,089	9,021	9,149	3,294
April 1	11,229	11,307	10,973	7,655	4,102	5,687	11,018	7,317	6,966	2,285
May 1	n.a.	8,982	8,617	5,597	2,858	4,471	9,080	5,702	5,589	1,523
June 1	6,095	5,979	6,178	3,530	1,806	3,251	7,281	4,474	4,017	P
EXPORTS**	217	322	284	262	217	176	132	144	145	126
GOV. PURCHASES**										
Armed Forces	211.3	201.9	191.2	159.4	226.3	240.8	162.3	83.4	141.0	167.4
U.S.D.A.	894.6	934.3	541.7	714.3	535.7	60.2	588.8	622.8	499.2	.....
Vet. Adm.	47.8	45.0	144.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

**Basis 1,000 24/303's. Calendar year for Exports. (a) Included in May. n.a. - Not available. P-Not available at press time. ¹July 1 to Mar. 31.

PACKS OF CANNED FRESH FIELD PEAS

Thousands of Actual Cases, all size cans

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982D
Blackeye	622	737	618	528	516	595	1,415	444	992	559
Field	671	215	224	389	342	267	378	312	493	325
Cream	389	345	116	201	240	309	121	123	273	183
Crowder	233	353	144	125	163	231	162	161	289	150
Purple Hull	712	952	735	539	793	810	376	805	691	691
Total	2,628	2,603	1,837	1,783	2,053	2,212	2,452	1,845	2,738	1,908
Tot. Basis 24/303. .	2,817	2,765	1,995	1,875	2,223	2,364	2,542	1,965	2,895	1,998

D - Reports discontinued to avoid disclosure.

PUMPKIN AND SQUASH PACKS BY SIZE OF CONTAINER AND AREA

Compiled by Economics & Statistics Div., Nat'l Food Processors Assn.

(Thousands of Actual Cases—Figures Rounded)

Units per Case & Size of Cont'nr	1973	1974	1975	1976	1977	1978	1979	1980	1981	D1982
*24/2,303 & 300 ...	1,329	1,350	1,496	1,670	1,005	1,101	1,320	1,286	1,280	1,377
24/2½	1,174	975	1,514	1,467	671	864	1,032	1,018	395	1,129
*6/10	765	703	1,006	762	474	446	524	406	1,396	636
Misc. Tin & Gl. .	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mid-West	2,140	1,553	2,935	2,879	1,621	1,943	2,160	2,052	2,305	2,583
Other States	1,132	1,475	1,080	1,019	529	468	717	658	765	559
Total	3,272	3,028	4,015	3,898	2,151	2,411	2,877	2,710	3,070	3,142
Tot. Bas. 303's ...	4,632	4,214	5,805	5,500	2,962	3,353	3,997	3,744	3,975	4,404

*2's included with 10's beginning 1981. D - Reports discontinued in 1983 to avoid disclosure.

CANNED WHITE POTATO PACKS IN THE U.S.

Compiled by Economics & Statistics Div., Nat'l. Food Processors Assn.

(Thousands of Actual Cases - April 1 of year shown to March 31 following year)

1946.....591	1952.....2,719	1958.....3,947	1964.....3,507	1970.....5,890	1976.....5,315
1947.....883	1953.....3,096	1959.....3,405	1965.....4,550	1971.....7,067	1977.....5,960
1948.....1,559	1954.....1,936	1960.....4,010	1966.....4,737	1972.....4,236	1978.....5,648
1949.....1,471	1955.....3,149	1961.....4,302	1967.....4,180	1973.....4,895	1979.....5,706
1950.....1,535	1956.....3,346	1962.....3,440	1968.....5,075	1974.....6,990	1980.....5,031
1951.....1,268	1957.....3,746	1963.....3,298	1969.....5,386	1975.....5,850	1981.....6,346

	1973	1974	1975	1976	1977	1978	1979	1980	1981	D1982
STYLE										
Whole	3,860	5,159	4,832	3,187	4,284	4,160	4,237	3,231	4,179	3,237
Sliced	850	1,484	944	1,951	1,459	1,278	1,239	1,467	1,577	1,100
Diced	185	348	75	178	217	209	230	333	289	254
CONTAINER SIZE										
24/8z	108	109	74	56	31	49	333	42	53	.....
24/300	1,114	1,470	1,035	606	696	642	884	687	796	641
24/303	2,159	3,315	3,018	3,102	3,242	3,145	2,767	2,717	3,217	1,981
6/10	1,338	1,805	1,484	1,458	1,889	1,742	1,609	1,483	1,862	1,916
Misc.	175	292	240	93	102	69	113	101	117	54
Total A/C	4,895	6,990	5,850	5,315	5,960	5,648	5,706	5,031	6,046	4,591
Total, Basis 303 ..	5,658	8,113	6,809	6,201	7,126	6,293	6,517	5,857	7,103	5,714

D - Reports discontinued. Primary States canning white potatoes: Ark., Calif., Del., Ind., Me., Minn., N.C., N.Y., Pa., Tenn., Va. and Wis.

SWEET POTATO PACKS IN THE UNITED STATES

Thousands of Cases, basis 24 No. 303 Cans. To Convert to 2's, multiply by .822

1940...1,194	1946...5,089	1952...6,091	1958...8,558	1964...7,865	1970...9,846	1976...7,960
1941...2,430	1947...2,055	1953...5,948	1959...8,864	1965...11,101	1971...10,056	1977...7,194
1942...1,121	1948...2,215	1954...4,954	1960...6,942	1966...10,024	1972...9,461	1978...9,436
1943...1,482	1949...3,837	1955...6,165	1961...8,157	1967...9,848	1973...11,415	1979...9,174
1944...2,050	1950...5,190	1956...6,177	1962...10,876	1968...10,846	1974...12,767	1980...5,917
1945...3,751	1951...3,964	1957...6,519	1963...8,756	1969...12,499	1975...7,668	1981...7,955

SWEET POTATO PACKS BY SIZE OF CONTAINER AND STATE

12 Months beginning July 1 of year shown (Thousand of Actual Cases—Figures Rounded)

SIZE	1979	1980	1981	1982	1983	1984	1985	1986	1987	†1988
24/8 oz.	184	111	157	108	91	111	70	88	79	P
24/2 Squat.	109	(a)	(a)	76	(a)	(a)	(a)	(a)	(a)	P
24/303 & 300.	1,345	985	1,435	1,343	967	1,040	1,120	1,339	1,210	P
24/3 Squat.	867	473	800	558	627	446	469	445	395	P
24/2½	944	746	992	650	447	592	702	720	720	P
12/3 cyl.	79	30	55	91	(a)	(a)	(a)	(a)	(a)	P
6/10	1,697	1,134	1,375	1,624	919	960	1,159	1,486	1,089	P
12/40 oz.	816	623	979	745	(a)	(a)	(a)	(a)	(a)	P
Miscellaneous	8	42	111	.....	913	817	1,004	1,535	1,054	P
*REGION										
East	2,265	1,476	1,473	1,125	750	405	605	801	n.a.	P
South & West.	2,865	1,785	4,430	4,070	3,213	3,561	3,919	4,813	n.a.	P
Ark., Ca.	919	933	(a)	(a)	(a)	(a)	(a)	(a)	n.a.	P
Total A/C	6,048	4,195	5,903	5,195	3,963	3,967	4,524	5,613	4,547	†4,414
Total Basis 24/303	9,174	5,917	7,955	7,049	5,315	5,283	6,149	7,469	6,055	†5,850

*Beginning 1981 data adjusted to conform with new NFPA uniform regional definitions. (See beginning of this Section VIII for description). Earlier years therefore not comparable. Prior to 1981 East data is for MD, Del. & NC; South & West data is for Fla., La. & Tenn. (a) Included in Misc. or South & West. (b) Included with 6/10. n.a. - Not available.

SWEET POTATO PACKS BY STYLE

(Thousands of Actual Cases—Figures Rounded)

STYLE	1979	1980	1981	1982	1983	1984	1985	1986	1987	†1988
Solid, Mashed.	179	128	141	93	82	n.a.	n.a.	n.a.	n.a.	P
Whole, Syrup.	1,697	940	1,529	1,217	953	933	954	1,244	932	P
Cuts & Halves*	3,918	2,926	3,917	3,678	2,782	2,835	3,323	4,047	3,369	P
Vacuum Pack	254	201	315	207	146	n.a.	n.a.	n.a.	n.a.	P
Total	6,048	4,195	5,903	5,195	3,963	3,967	4,524	5,613	4,547	†4,414

*Cuts & Whole in syrup for 1978.

P - Not available at press time.

† Pack to April 1.

SAUERKRAUT PACKS IN THE UNITED STATES

Compiled by National Kraut Packers Association

Thousands of Cases, Tin & Glass basis 24 No. 303 Cans. Season beginning year shown.

1939	7,226	1946	10,103	1953	10,043	1960	9,833	1967	11,424	1974	12,209
1940	10,648	1947	5,175	1954	9,829	1961	9,923	1968	10,825	1975	9,859
1941	10,011	1948	7,938	1955	9,267	1962	9,400	1969	10,569	1976	9,409
1942	4,299	1949	9,527	1956	9,922	1963	9,554	1970	12,088	1977	9,419
1943	4,541	1950	10,857	1957	9,673	1964	9,026	1971	11,266	1978	9,509
1944	3,954	1951	8,834	1958	9,316	1965	10,768	1972	10,008	1979	9,016
1945	10,358	1952	8,688	1959	8,229	1966	10,019	1973	10,573	1980	8,173

SAUERKRAUT PACKS BY STATE AND CONTAINER SIZE

Thousands of Cases. Figures rounded—12 month pack beginning Sept. 1 of year shown.

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
BASIS 24/303 CANS										
Tin, East	3,420	3,020	2,457	2,842	2,606	2,197	2,441	2,096	1,901	1,980
Tin, Midwest	3,792	3,722	3,658	3,487	3,351	2,115	3,034	2,979	3,802	3,353
Tin, Other	887	951	817	880	992	486	493	302	238	401
Total Tin	8,099	7,693	6,932	7,209	6,949	4,797	5,968	5,378	5,941	5,733
Glass	1,410	1,324	1,242	1,478	1,468	1,047	1,043	2,309	1,778	1,252
Tot. Tin & Glass	9,509	9,016	8,173	8,686	8,417	5,844	7,011	7,687	7,719	6,985
Bags, 303 basis	1,624	1,774	1,587	1,377	1,299	1,330	1,741	2,122	1,460	1,468
Tot. above	11,133	10,790	9,760	10,063	9,716	7,174	8,752	9,809	9,179	8,453
CONTAINER SIZE (Actual Cases)										
24/8 oz.	793	591	707	504	337	413	501	406	330	392
24/300	200	210	188	221	203	130	164	185	660	453
24/303	2,949	2,777	2,748	2,643	2,574	1,739	1,997	2,270	1,957	2,002
24/2½	1,340	1,341	1,066	1,192	1,117	740	941	804	848	798
6/10	1,220	1,149	971	1,131	1,043	769	1,043	832	981	950
Misc. Tin	169	149	151	137	346	153	190	115	102	146
12/Qr. glass	1,125	1,105	1,057	1,231	1,239	866	1,053	950	1,366	946
12/Pt. glass	436	312	250	336	220	245	224	219	321	257
Misc. Glass										73
Tot. Tin & Gl.	8,232	7,633	7,138	7,395	7,079	5,055	6,113	5,782	6,564	6,018
12/2 lb. bags	1,353	1,534	1,403	1,232	1,097	1,251	1,575	1,985	1,369	1,341
12/1 lb. bags	902	874	721	596	693	453	719	745	507	579
Tot. Above A/C	10,487	10,041	9,262	9,223	8,869	6,759	8,407	8,513	8,439	7,939
THOUSANDS OF CONTAINERS (not included in above 303's or Actual Case figures)										
Misc. Jars & Pails							28	136		94
5 gal. pails	4	1	1	49	48	33	235	21	73	95
Barrels (sold bulk)	21	23	31	36	20	10	41	16	7	16
BARRELS CUT	706	685	581	601	572	412	563	565	514	521

PROPORTION Of Total Sauerkraut Pack By Container Type

1984	Metal	61%	Poly Bag	17%	Glass	10%	Misc.	11%
1985	Metal	55%	Poly Bag	21%	Glass	21%	Misc.	4%
1986	Metal	64%	Poly Bag	16%	Glass	17%	Misc.	3%
1987	Metal	66%	Poly Bag	16%	Glass	11%	Misc.	7%

EAST includes N.Y., Md., Pa. MIDWEST: Wis., Ill., Ohio, Mich., Ind. OTHER: Ore., Wash., Colo., Tenn., Mass. ¹Glass & bags packed by prime mfgs. only. ²Basis 4/1 gal. per case. Prior to 1987 included with "Misc. Jars & Pails". ³Converted from all container figures. ⁴Bulk (45 gal.) Barrels, Plastic Pails & Misc. Jars. ⁵One gallon equivalents. Pails only in 1987.

SPINACH PACKS IN THE UNITED STATES *

Compiled by Economics & Statistics Div., Nat'l Food Processors Assn.

Thousands of Cases, basis 24 No. 303 Cans. To convert to 2's, multiply by .822

1909	311	1934	4,395	1944	12,148	1954	4,854	1964	7,641	1974	10,834
1914	817	1935	5,268	1945	10,537	1955	7,326	1965	6,395	1975	8,328
1919	1,411	1936	5,149	1946	10,307	1956	7,819	1966	6,954	1976	6,304
1921	1,212	1937	7,468	1947	4,769	1957	7,740	1967	7,409	1977	7,108
1923	3,912	1938	3,529	1948	6,113	1958	6,390	1968	7,990	1978	6,214
1925	3,195	1939	4,948	1949	8,178	1959	8,701	1969	6,577	1979	8,121
1927	3,923	1940	6,076	1950	6,796	1960	7,797	1970	7,270	1980	6,314
1929	7,521	1941	6,118	1951	9,331	1961	7,708	1971	7,675	1981	5,458
1931	2,768	1942	11,671	1952	7,459	1962	7,266	1972	8,255	1982*	
1933	3,878	1943	9,005	1953	6,597	1963	8,031	1973	8,944		

*1982-83 Pack Mar. 1 to Oct. 1, 1982 3,038,993 basis 303's, compared with 3,363,038 cases same period year earlier. Reports discontinued thereafter to avoid disclosure.

TOMATO PACKS IN THE UNITED STATES

Thousands of Cases, basis 24 No. 303 Cans

1899 ... 18,119	1919 ... 22,512	1932 ... 24,848	1945 ... 20,444	1958 ... 37,152	1971 ... 38,367
1904 ... 19,587	1920 ... 23,674	1933 ... 24,961	1946 ... 29,106	1959 ... 29,422	1972 ... 43,301
1908 ... 23,906	1921 ... 8,366	1934 ... 27,299	1947 ... 33,805	1960 ... 30,991	1973 ... 45,431
1909 ... 22,875	1922 ... 24,028	1935 ... 32,921	1948 ... 29,759	1961 ... 34,034	1974 ... 43,784
1910 ... 19,232	1923 ... 30,555	1936 ... 29,785	1949 ... 26,275	1962 ... 35,541	1975 ... 53,465
1911 ... 20,303	1924 ... 26,071	1937 ... 32,006	1950 ... 25,751	1963 ... 33,041	1976 ... 42,805
1912 ... 29,201	1925 ... 41,172	1938 ... 28,220	1951 ... 38,759	1964 ... 36,431	1977 ... 54,124
1913 ... 29,585	1926 ... 19,690	1939 ... 29,848	1952 ... 34,136	1965 ... 36,015	1978 ... 49,241
1914 ... 31,700	1927 ... 27,358	1940 ... 36,030	1953 ... 27,248	1966 ... 32,662	1979 ... 42,789
1915 ... 17,637	1928 ... 17,782	1941 ... 38,746	1954 ... 26,629	1967 ... 39,127	CCC ... 10,107
1916 ... 27,369	1929 ... 29,458	1942 ... 50,327	1955 ... 30,167	1968 ... 48,422	1980 ... 36,697
1917 ... 31,397	1930 ... 35,399	1943 ... 35,708	1956 ... 36,457	1969 ... 32,036	CCC ... 16,399
1918 ... 33,076	1931 ... 19,936	1944 ... 31,841	1957 ... 26,446	1970 ... 39,017	1981 ... 38,325
					CCC ... 13,612

¹CCC means California Concentrated Crushed. Prior to 1979 data not collected separately. Reports discontinued (data not collected) beginning 1988.

U.S. CANNED TOMATO PACKS BY REGION*

Source: National Food Processors Assn. and California League of Food Processors

Thousands of Actual Cases — Figures Rounded — Calendar Year

REGION*	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
East	2,112	1,274	2,237	2,803	2,278	2,195	1,127	717	(b)	(b)
Midwest	3,263	2,599	2,716	3,794	4,006	4,843	4,141	4,702	5,306	4,964
West	26,900	23,682	23,591	24,652	21,392	24,022	22,505	23,821	26,096	30,468
South	1,415	1,044	1,156	2,229	1,590	1,680	1,212	1,254	2,706	2,315
Tot. above A/C...	33,689	28,599	29,700	33,478	29,266	32,740	28,986	30,494	34,107	37,747
Tot Bas. 24/303 ... (e)42,789(e)36,697(e)38,325				43,286	37,597	43,170	37,485	38,955	44,634	50,626
Tot. Bas. 24/2 ... (e)35,173(e)30,165(e)31,503				35,581	30,905	35,486	30,813	32,021	36,689	41,615
CCC ¹ (A/C)	6,281	10,158	8,421	12,292	14,859	14,302	13,773	14,870	18,160	D
Tot. all A/C	39,970	38,757	38,120	45,770	44,125	47,042	42,759	45,364	52,267	n.a.
Tot. all Bas. 303 (e)	52,896	53,096	51,937	63,089	61,561	66,376	59,585	63,148	73,237	n.a.

*This table completely revised in the 1985 Almanac. For definitions of region see note in box at beginning of this Section VIII. NFPA 1984 tomato pack report provided separate breakdown for the California pack of concentrated crushed tomatoes and adjusted the '82 and '83 figures. Almanac editors adjusted '79, '80, & '81. (e) Conversions may include estimate for small amount of mixed misc. container sizes. ¹California concentrated crushed includes ground tomatoes and pizza sauce (including prepared with oil or formulated). n.a. - Not available. (a) Included in West. (b) Included in South. D - Reports discontinued.

TOMATO PACKS BY SIZE OF CONTAINER

Thousands of Actual Cases—Figures Rounded—Calendar Year

Units per Case & Size of Cont'nr	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
24/2	118	.....	.....	0	0	(a)	(a)	(a)	(a)	(a)
24/8Z	886	687	765	500	784	678	288	378	540	439
48/1 Pic	234	200	270	668	(a)	(a)	(a)	(a)	(a)	(a)
24/300/303	18,024	14,203	14,637	17,448	14,631	15,136	14,827	14,203	15,968	16,624
24/2 1/2	6,011	4,896	4,991	5,087	3,572	4,748	3,845	3,476	3,557	4,509
6/10	7,809	7,558	8,187	9,546	9,332	11,145	8,958	9,312	12,521	15,072
Misc. Tin & Gl ...	608	1,055	849	229	948	1,034	1,068	3,125	1,521	1,104
Total	33,689	28,599	29,700	33,478	29,266	32,740	28,986	30,494	34,107	37,747

(a) Included in Misc.

**OHIO'S FINEST TOMATOES, TOMATO PRODUCTS,
AND SAUERKRAUT**

HIRZEL CANNING CO. and FARMS

GROWERS AND PACKERS OF
STAR CROSS, SILVER FLEECE AND DEI FRATELLI BRANDS

411 Lemoyne Rd., Toledo, Ohio 43619

Tel. 419-693-0531

CANNED TOMATOES — CARRYOVER—PACKS—STOCKS—SHIPMENTS

(Thousands of Actual Cases—Figures Rounded—Season beginning year shown)

	1979	1980	1981	*1982	*1983	*1984	*1985	*1986	*1987	*1988
Carryover 7/1	10,866	9,017	7,423	4,791	7,202	7,207	8,377	7,567	4,574	5,581
Pack 7/1 - 11/1 . . .	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	36,225
Pack 11/1 - 7/1 . . .	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	P
Pack, 7/1 - 1/1 . . .	38,491	38,019	37,410	32,059	28,185	31,583	28,066	29,705	32,576	36,339
Pack, 1/1 - 4/1 . . .	389	163	728	295	264	249	162	411	1,408	n.a.
Pack, 4/1 - 7/1 . . .	349	547	691	787	893	671	627	1,121		n.a.
Canner Supply	50,094	47,746	46,252	37,932	36,544	39,710	37,232	38,804	38,557	P
CANNER SHIPMENTS										
7/1 to 11/1									n.a.	16,414
11/1 to 1/1	20,585	22,298	23,547	17,108	16,341	17,773	15,332	18,842	n.a.	6,076
1/1 to 4/1	13,102	11,036	10,057	8,381	8,398	11,234	8,819	9,092	n.a.	P
4/1 to 7/1	7,390	6,989	6,185	5,240	4,599	2,326	5,514	6,297	n.a.	P
Tot. 7/1 to 7/1 . . .	41,077	40,322	39,790	30,730	29,337	31,333	29,664	34,231	32,976	P
CANNER STOCKS										
November 1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	25,392
January 1	28,771	24,738	21,286	19,742	19,046	21,017	21,111	18,431	n.a.	19,431
April 1	16,058	13,865	11,957	11,656	10,913	10,033	12,454	9,749	n.a.	P
July 1	9,017	7,423	6,462	7,202	7,207	8,377	7,567	4,574	5,581	P
EXPORTS**	1,779	1,456	1,341	832	583	498	664	579	335	493
GVM'T PURCHASES**										
Armed Forces	518.4	532.6	583.8	425.3	676.5	517.1	576.2	545.1	550.3	555.4
USDA	2,858.3	431.0	36.4	75.6	722.5	1,086.8	882.5	1,234.5	839.2	527.5
Vet. Admin.	75.5	80.1	65.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

* Not comparable to earlier years. Calif. concentrated crushed packs deleted. See Note under Tomato Packs By Region. ** Basis 1,000 cases 24/303, Season beginning year shown. Calendar year for Exports.

CALIFORNIA TOMATO PACKS BY TYPE & STYLE

Source: California League of Food Processors
Thousands of Actual Cases

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Whole Round	17,944	14,960	13,339	15,390	11,464	13,888	12,137	11,894	12,139	12,277
Whole Pear	1,686	1,774	1,087	980	936	1,144	974	641	748	1,111
Stewed	6,103	5,120	5,483	5,595	5,948	5,252	5,364	5,526	6,567	6,770
Other Styles†	1,847	1,818	3,584	2,641	3,044	3,665	3,913	5,656	5,600	10,176
Total	27,579	23,672	23,493	24,606	21,392	23,949	22,388	23,717	26,054	30,334
Conc. Crushed*										
24/300-303	221	(m)	275	408	479	325	860	(m)	1,487	D
24/2½	720	1,215	1,054	1,321	1,235	1,531	1,912	927	1,400	D
6/10	5,218	8,361	7,005	10,417	13,071	12,393	11,001	13,805	15,020	D
Misc.	122	582	87	146	70	53	.....	138	253	D
Total	6,281	10,158	8,421	12,292	14,859	14,302	13,773	14,870	18,160	D
Total All	33,861	33,830	31,914	36,898	36,251	38,251	36,161	38,587	44,214	D

(m) Included in "Misc." † Includes diced, sliced, wedges and chunks. * Includes ground tomatoes, and pizza sauce (including prepared with oil or formulated). † Includes some bulk packs converted to 6/10's. D - Reports discontinued.

CALIFORNIA TOMATO PASTE PACKS

Retail sizes not included.

Source: California League of Food Processors - Thousands of Cases

	1981	1982	1983	1984	1985	1986	1987	1988
6/10 Actual Cases	1,013	1,288	1,202	1,835	1,533	1,610	1,746	D
Bulk Pack basis 6/10*	15,423	18,384	18,722	21,617	22,200	22,357	24,432	D
Total	16,436	19,672	19,924	23,452	23,733	23,967	26,178	D

* Includes product packed in barrels, tanks, tank cars, 6/12's etc., converted to standard 6/10 basis, 32% salt free solids. D - Reports discontinued.

TOMATO CATSUP PACKS IN THE UNITED STATES*

Compiled by Economics & Statistics Div., Nat'l Food Processors Assn.

(Thousands of Actual Cases—Figures Rounded)

1942 ... 11,771	1948 ... 16,897	1954 ... 18,565	1960 ... 33,818	1966 ... 41,450	1972* ... 6,403
1943 ... 9,382	1949 ... 10,900	1955 ... 22,947	1961 ... 33,706	1967 ... 44,256	1973* ... 6,518
1944 ... 11,688	1950 ... 14,793	1956 ... 30,301	1962 ... 42,018	1968* ... 10,509	1974* ... 7,739
1945 ... 11,484	1951 ... 24,015	1957 ... 24,079	1963 ... 34,705	1969* ... 4,950	1975* ... 10,083
1946 ... 15,751	1952 ... 19,652	1958 ... 28,364	1964 ... 38,775	1970* ... 5,377	1976* ... 5,313
1947 ... 20,661	1953 ... 19,116	1959 ... 25,774	1965 ... 41,130	1971* ... 7,490	1977* ... 8,065

Thousands of Cases 6/10 and larger

	1978	1979	1980	1981	1982	1983	1984	1985	1986	D1987
† California	5,605	5,742	4,575	3,959	4,422	4,719	4,566	4,072	3,650	3,931
Other States	1,155	833	975	911	1,320	1,333	2,107	2,264	1,873	3,276
Total	6,760	6,575	5,550	4,870	5,742	6,052	6,673	6,336	5,523	7,207

* Includes only No. 10's & larger 1968 and thereafter. Includes bulk packs converted to #10's. See also Bureau of Census reports, under Pulp pack. † Reports by California League of Food Processors. D - Reports discontinued in 1988.

CHILI SAUCE PACKS IN THE UNITED STATES

Compiled by Economics & Statistics Div., Nat'l Food Processors Assn. and California League of Food Processors

(Thousands of Actual Cases—Figures Rounded)

1947 ... 3,621	1953 ... 2,563	1959 ... 2,826	1965 ... 2,646	1971 ... 2,195	1977 ... 2,111
1948 ... 2,544	1954 ... 1,979	1960 ... 2,567	1966 ... 2,853	1972 ... 2,511	1978 ... 2,778
1949 ... 1,370	1955 ... 2,395	1961 ... 2,489	1967 ... 2,453	1973 ... 2,225	1979 ... 2,151
1950 ... 1,814	1956 ... 3,292	1962 ... 2,889	1968 ... 3,355	1974 ... 2,099	1980 ... 2,261
1951 ... 3,220	1957 ... 2,208	1963 ... 2,145	1969 ... 2,506	1975 ... 2,126	1981 ... 1,978
1952 ... 2,848	1958 ... 2,099	1964 ... 2,443	1970 ... 2,427	1976 ... 2,442	1982 ... 2,292

PACK BY SIZE OF CONTAINER

	1978	1979	1980	1981	1982	1983	1984	1985	1986	D1987
12 oz. glass	1,310	1,185	1,289	1,208	1,495	1,192	†460	†309	n.a.	n.a.
6/10 tin	1,468	966	972	770	796	764	†656	†773	n.a.	n.a.
Total A/C*	2,778	2,151	2,261	1,978	2,292	1,956	2,248	2,147	2,045	1,437
Tot. Basis 12/12 oz.	9,663	6,680	5,723	4,719	5,127	4,674	5,518	5,858	6,531	4,540
Tot. Basis 24/303's	2,834	1,977	2,038	1,680	1,826	1,665	1,965	2,086	2,326	1,622
Tot. Basis 6/10 ...	1,745	1,217	1,255	1,035	1,124	1,025	1,210	1,285	1,432	999
Calif. A/C*	1,854	1,317	1,331	1,001	1,085	993	1,116	1,082	n.a.	n.a.
Calif. Basis 6/10 ...	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	841	1,011	631
Other States A/C*	924	834	930	977	1,207	963	1,132	1,065	n.a.	n.a.
Other Sts Basis 6/10	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	444	421	368

* Includes bulk packs converted to 6/10. † California only. A/C - Actual Cases. D - Reports discontinued in 1988.

TOMATO JUICE PACKS IN THE U.S.*

Compiled by Economics & Statistics Div., Nat'l Food Processors Assn. and California League of Food Processors

(Thousands of Actual Cases—Figures Rounded)

1931 ... 4,584	1941 ... 19,046	1950 ... 22,741	1959 ... 28,303	1968 ... 31,359	1977 ... 21,711
1933 ... 4,170	1942 ... 20,738	1951 ... 31,626	1960 ... 29,937	1969 ... 26,388	1978 ... 25,313
1934 ... 5,704	1943 ... 19,252	1952 ... 31,417	1961 ... 28,845	1970 ... 27,998	1979 ... 24,312
1935 ... 9,287	1944 ... 26,487	1953 ... 32,733	1962 ... 36,457	1971 ... 29,540	1980 ... 21,746
1936 ... 13,105	1945 ... 24,553	1954 ... 23,466	1963 ... 31,284	1972 ... 23,741	1981 ... 14,075
1937 ... 13,445	1946 ... 30,525	1955 ... 23,699	1964 ... 32,397	1973 ... 26,771	1982 ... 18,461
1938 ... 8,988	1947 ... 16,880	1956 ... 28,017	1965 ... 30,564	1974 ... 28,053	1983 ... Reports discontinued
1939 ... 11,091	1948 ... 32,701	1957 ... 28,483	1966 ... 29,753	1975 ... 27,603	
1940 ... 12,414	1949 ... 20,560	1958 ... 32,621	1967 ... 33,151	1976 ... 24,764	

* Figures through 1967 include tomato juice cocktail. 1968 and thereafter include only tomato juice concentrate and tomato juice.

TOMATO PULP (PUREE) PACKS IN THE U.S.*

Source: Nat'l. Food Processors Assn.; and California League of Food Processors
(Thousands of Actual Cases)

REGION*	1978	1979	1980	1981	1982	1983	†1984	†1985	†1986	†1987D
EAST.....	215	298	125	284	313	(b)	n.a.	n.a.	n.a.	n.a.
MIDWEST.....	207	201	166	183	276	600	n.a.	n.a.	n.a.	n.a.
WEST.....	4,884	6,036	4,763	3,861	5,560	4,820	n.a.	n.a.	n.a.	n.a.
SOUTH.....	.....	.....	.....	(b)	(b)	(b)	n.a.	n.a.	n.a.	n.a.
Total Act. Cs.	5,305	6,535	5,054	4,329	6,150	5,420	n.a.	n.a.	n.a.	n.a.
Tot. Bas. 24/303. . .	8,425	10,395	8,141	6,900	9,788	8,703	n.a.	n.a.	n.a.	n.a.
Tot. Bas. 6/10.	5,188	6,401	5,013	4,249	6,027	5,359	n.a.	n.a.	n.a.	n.a.
California A/C	4,876	6,031	4,762	3,860	5,556	4,816	3,917	3,698	3,129	5,030
Other States.....	429	504	292	469	594	604	n.a.	n.a.	n.a.	n.a.
BY CONTAINER SIZE										
24/300/303's	324	395	177	231	321	249	150	(a)	(a)	(a)
24/2's	31	33	30	32	47	(a)	(a)	(a)	(a)	(a)
24/2½'s	1,545	2,225	1,658	1,591	1,698	1,744	786	702	717	713
6/10's**	3,103	3,452	2,904	2,156	3,730	3,113	2,778	2,662	2,285	3,885
Misc.	303	430	285	319	353	314	203	334	127	432
Tot. A/C	5,305	6,535	5,054	4,329	6,150	5,420	3,917	3,698	3,129	5,030

*303 details not available in later years. Table revised with 1985 Almanac to reflect actual cases by Region. See NFPA definitions of Region in box at beginning of this Section VIII. **Includes larger sizes in Calif. converted to 6/10's. †California only. (a) Included in "Misc." (b) In Midwest. n.a. - Not available. D - Reports discontinued in 1988.

TOMATO PRODUCT PACKS AND VALUES REPORTED BY BUREAU OF CENSUS

Thousands of Cases and Millions of Dollars

	1967		1972		1977		1982	
	Pack	Value	Pack	Value	PackR	Value	Pack	Value
Tomato Sauces	25,197	131.2	28,414	146.9	51,716	414.5	77,364	803.6
7.1 oz to 10 oz (8z S & T etc)	11,355	63.4	12,699	73.4	9,286	81.5	14,971	193.4
Other Sizes	13,842	67.8	15,715	73.5	42,430	333.0	62,393	610.2
Catsup.....	42,134	200.7	44,514	229.5	49,858	414.8	57,070	569.4
14 oz. to 32 oz.	18,246	84.1	n.a.	n.a.	32,884	276.4	35,268	321.8
Other sizes (incl. indiv) ...	23,598	115.9	n.a.	n.a.	16,974	138.4	21,802	247.6
Chili Sauce	2,758	11.8	3,020	15.4	5,416	40.7	4,733	44.5
Barbecue Sauce	4,434	18.2	8,006	34.6	6,009	38.5	15,357	149.5
Tomato Paste	13,699	101.1	14,262	130.3	25,771	343.9	31,163	472.6
4.1 oz to 7 oz (6 oz. etc) ...	3,768	23.3	5,335	32.1	4,613	46.4	7,423	81.1
100.1 oz. to 115 oz. (No. 10)	2,304	22.7	2,061	21.8	2,537	33.3	1,775	28.9
Other (incl. bulk-equiv 24%)	7,627	55.1	6,866	76.4	18,621	264.2	21,965	362.6
Tom Pulp & Puree	7,233	41.0	6,849	37.1	9,356	76.0	10,713	120.9
Other Tom Prod. n.s.k.	1,225	4.4	1,663	9.5	.....	21.6	.....	14.1
TOTAL.....	96,680	507.7	106,728	603.3	148,126	1,350.0	196,400	2,174.4

¹Except catsup & chili sauce, pulp, puree, or paste. ²775.1 million pounds converted to thousands of cases, basis 6/10's. ³914.3 mil. lbs. converted to thousand cases, basis 6/10's. R - Revised.

Twelfth Biennial Edition

THE 1988-89 DIRECTORY OF THE CANNING, FREEZING, PRESERVING INDUSTRIES

FOR FOOD BUYERS, The Directory is the ideal source book. It's the easy way to find basic food products, to find new products to spruce up your menu and to fill out your product line. This well-organized, easy to use directory will give you more detail about each company than any other directory. All of the information that you need to do business intelligently and efficiently with the packer is here. \$110 each

By the Publishers of THE ALMANAC

Edward E. Judge & Sons, Inc.

P.O. Box 866, Westminster, MD 21157 USA (301) 876-2052



CANNED FRUIT PACK STATISTICS

Compiled by National Food Processors Assn.; California's League of Food Processors; Cling Peach Advisory Board; Florida Citrus Processors Assn.; Northwest Food Processors

GLASS PACK: In most of the tables showing the pack by Size of Container, all Glass pack has been included with tin of comparable size; viz., No. 2½ jar with No. 2½ tin; 16 oz. jar with 303 tin, etc.

SUMMARY OF CANNED FRUIT AND FRUIT JUICE PACKS

Thousands of Cases—Basis 24/2½—Figures Rounded

FRUITS	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Apples (b)	2,414	1,648	1,317	1,586	1,553	D	D	D	D	D
Applesauce (b) ...	12,742	10,636	8,819	10,875	10,480	D	D	D	D	D
Apricots	2,887	2,994	1,208	1,626	1,167	1,861	1,532	505	1,281	1,381
Blackberries	10	17	38	47	46	D	D	D	D	D
Blueberries	96	78	327	289	167	D	D	D	D	D
RSP Cherries	526	545	213	471	189	389	390	253	474	434
Sweet Cherries ...	651	428	316	498	496	357	405	327	451	439
Cranb. Sec.	3,618	3,633	3,542	3,562	D	D	D	D	D	D
Frt. Cocktail (c) ...	13,815	14,826	11,383	8,722	8,223	8,671	10,058	8,976	9,344	9,724
Frt. for Salad (c) ...	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)	(e)
Fla. Grapef. Seg. (b)	1,355	1,152	926	851	D	D	D	D	D	D
Misc. Fr. (a)	97	113	41	54	38	D	D	D	D	D
Mixed Fr. (c)	3,145	3,215	2,545	2,401	1,335	2,506	2,509	1,845	2,433	2,306
Peaches	25,840	26,765	21,763	18,608	11,421	19,512	18,401	15,506	15,898	18,512
Pears	10,568	10,928	9,700	7,789	7,214	7,657	7,813	7,209	9,125	9,169
Pineapple (b)	¹ 18,545	¹ 17,057	¹ 16,640	D	D	D	D	D	D	D
Purple Plums	711	1,066	940	375	443	577	642	632	488	592
Total Fruits	97,020	95,100	79,718	56,960	42,772	41,530	41,750	35,253	39,494	42,557
No. Prod. in Tots. ...	15	15	15	14	12	9	9	9	9	9
FRUIT JUICES (b)										
Apple	18,237	18,863	18,728	18,732	D	D	D	D	D	D
Grapefruit (f)	16,307	13,082	15,230	8,029	6,555	7,271	6,855	6,189	5,323	P
Orange (f)	12,289	11,849	9,852	6,754	6,260	5,117	5,234	5,597	5,000	P
Citrus Blend (f)	1,045	736	556	448	382	424	329	367	309	P
Pineapple	¹ 8,408	¹ 9,391	¹ 9,237	D	D	D	D	D	D	D
Total Juices	56,286	53,921	53,603	*	*	*	*	*	*	*
Total Fruits & Juices	153,306	149,021	133,256	*	*	*	*	*	*	*

(a) Includes Boysenberries, Loganberries, Youngberries, Gooseberries, Raspberries, Strawberries, Plums not purple, Rhubarb. (b) Pack beginning year shown. (c) California. D - Reports discontinued to avoid disclosure. (e) Included with Mixed Fruit. (f) Florida only beginning 1982. P - Not available at press time. * Not complete. ¹ Calendar year.

U.S. PACKS OF APPLES

Thousands of Cases — Pack Beginning Year Shown

Actual Cases	1935	2,332	1943	1,878	1950	5,265	1958	3,639	1966	3,483	
1923	2,126	1936	2,620	1944	3,356	1951	3,388	1959	4,034	1967	3,676
1925	3,467	1937	2,672	1945	1,192	1952	2,560	1960	3,326	1968	3,604
1927	2,939	1938	1,751	Basis 6/10's		1953	2,942	1961	3,986	1969	3,128
1929	2,593	1939	2,841	1946	3,266	1954	4,709	1962	4,036	1970	2,271
1931	2,067	1940	2,250	1947	2,242	1955	3,587	1963	4,062	1971	2,564
1933	2,554	1941	4,348	1948	1,687	1956	3,917	1964	3,928	1972	2,350
1934	2,584	1942	4,165	1949	4,213	1957	3,668	1965	4,409	1973	3,528

PACKS OF APPLES BY AREA

Thousands of cases - Basis 6/10's per case—Pack Aug. 1 to Aug. 1 Beginning Year Shown

	*1974	1975	1976	1977	1978	1979	1980	1981	1982	†1983
East ¹	1,569	623	836	961	1,084	1,274	895	892	1,196	n.a.
Wash., Ore., Ida. ...	446	376	549	493	322	549	586	276	227	n.a.
Other States	349	213	317	397	513	393	311	264	301	n.a.
Total U.S.	2,365	1,213	1,702	1,851	1,919	2,216	1,791	1,431	1,724	1,688

* Sept. 1 to Sept. 1.
Va., W.Va., N.Y.

† Aug. 1, 1983 to June 1, 1984. Reports discontinued thereafter.

¹ Includes Md., Pa.,

U.S. PACK OF APPLE SAUCE

Thousands of Actual Cases, Figures Rounded. Pack Aug. 1 to Aug. 1 beginning Year Shown.

1929	904	1938	1,527	1945	1,984	1952	9,397	1959	17,904	1966	20,166
1931	1,010	1939	3,057	1946	8,840	1953	11,732	1960	18,266	1967	24,452
1933	1,730	1940	2,635	1947	6,084	1954	16,017	1961	18,768	1968	25,263
1934	1,892	1941	4,182	1948	4,852	1955	14,078	1962	20,991	1969	28,266
1935	1,887	1942	4,590	1949	8,974	1956	16,115	1963	21,475	1970	24,291
1936	2,353	1943	2,226	1950	13,321	1957	14,636	1964	25,095	1971	26,399
1937	3,161	1944	4,302	1951	9,456	1958	16,599	1965	25,836	1972	20,767
										1973	25,313

PACK OF APPLE SAUCE BY STATE AND SIZE OF CONTAINER

	*1974	1975	1976	1977	1978	1979	1980	1981	1982	D1983
East	18,728	8,688	8,306	10,701	12,145	12,654	10,691	8,870	12,423	10,157
West	3,895	3,643	3,446	3,343	3,356	4,903	4,009	3,437	2,664	4,105
Other States	5,771	3,788	3,604	4,104	4,062	4,458	3,913	3,028	4,223	3,108
Tot. U.S.	28,393	16,118	15,355	18,148	19,564	22,015	18,613	15,335	19,311	17,371
24/8 oz	1,726	222	235	323	280	689	95	79	29	.....
24/300-303	7,891	6,033	5,338	4,636	5,217	6,195	4,876	3,987	3,653	3,296
24/15 oz	1,866	755	766	881	1,011	956	1,410	768	810	741
12/25 oz. (a)	4,641	2,188	2,122	3,056	3,478	3,919	3,606	3,139	4,987	3,625
12/35 oz	3,710	1,476	1,557	2,109	2,076	2,067	1,316	1,480	1,658	1,330
6/50 oz	3,279	2,370	2,778	3,457	3,382	3,959	4,022	3,136	4,723	3,827
6/10	4,246	2,751	2,349	3,166	3,958	3,915	3,115	2,505	3,197	3,858
Misc. Tin & Gl. (b)	1,035	324	210	519	162	316	173	240	254	694

(a) Includes 25 oz. glass and 3 cyl. tin. (b) Includes 24/2½. *Sept. 1 to Sept. 1. D - Pack to 6/1/84.
Reports discontinued.

U.S. PACKS OF APPLE JUICE

Source: National Food Processors Association. With Permission.

Thousands of Actual Cases, Figures Rounded, Pack Aug. 1 to Aug. 1 Beginning Year Shown.

1939	393	1945	1,316	1951	3,174	1957	4,653	1963	8,558	1969	13,503
1940	506	1946	3,524	1952	3,199	1958	5,346	1964	9,784	1970	14,472
1941	1,726	1947	1,181	1953	3,081	1959	6,769	1965	9,670	1971	14,148
1942	1,645	1948	1,181	1954	4,220	1960	6,289	1966	8,953	1972	14,277
1943	1,740	1949	2,770	1955	3,508	1961	6,974	1967	9,029	1973	15,623
1944	2,851	1950	3,470	1956	4,266	1962	7,483	1968	9,641	1974	16,399

PACK OF APPLE JUICE BY AREA AND SIZE OF CONTAINER

	1973	*1974	1975	1976	1977	1978	1979	1980	1981	D1982
East	10,100	10,933	8,473	8,738	11,044	13,941	13,589	13,921	13,195	15,392
Midwest	1,527	1,819	2,564	2,386	2,257	4,905	2,783	2,861	3,223	4,635
West	3,996	3,647	4,889	5,429	6,528	7,515	11,707	12,623	13,214	10,204
Total U.S.	15,623	16,399	15,926	16,553	19,828	26,361	28,079	29,405	29,632	30,232
48/5 to 6 oz. Tin ...	1,777	1,819	1,491	1,915	2,235	3,285	2,638	2,641	2,909	4,097
12/3 Cyl-46 oz T. ...	3,629	3,193	3,037	2,491	2,662	3,624	3,348	2,910	2,169	2,684
24/12 oz. glass ...	76	41	56	450	676	867	1,019	1,246	1,304	(a)
12/32 oz. glass ...	6,264	6,231	4,266	3,787	4,863	5,425	5,826	4,713	3,778	4,113
12/40 oz. glass ...	828	929	989	810	854	1,138	836	764	618	514
6/64 oz. glass ...	2,272	2,714	3,545	4,520	5,841	8,502	10,440	12,517	13,971	14,084
4/1 gallon jug ...	600	960	1,609	1,730	1,629	2,003	2,479	2,113	2,389	2,586
Misc. tin & gl.	176	511	933	850	1,068	1,516	1,493	2,501	2,495	2,153
Tot Basis 24/2 ...	14,793	15,433	15,264	15,412	18,218	24,146	25,751	26,446	26,275	26,694
Tot Basis 24/2½. ...	10,265	10,811	10,826	10,920	12,906	17,137	18,237	18,863	18,728	18,732

*Sept. 1 to Sept. 1. D - Reports discontinued with the 1982-83 pack. (a) In Misc. East: Md., Mass., N.H., N.Y., Pa., Va., W.Va. Midwest: Mich., Mo., Ohio, Wis. West: Cal., Col., Ore., Wash.

U.S. PACKS OF APRICOTS

California Pack, Stock & Shipments Compiled by California League of Food Processors

Thousands of Actual Cases, Figures Rounded

1923 ... *1,562	1933..... 2,666	1943..... 1,256	1953..... 6,443	1963..... 5,369	1973.... *5,634
1924 ... *2,050	1934..... 2,165	1944..... 8,030	1954..... 3,731	1964..... 6,935	1974.... *2,793
1925 ... *2,197	1935..... 3,476	1945..... 4,238	1955..... 7,831	1965..... 6,769	1975.... *6,145
1926 ... 3,394	1936..... 3,135	1946.... 10,802	1956..... 5,558	1966.... *6,958	1976.... *3,377
1927 ... *3,117	1937..... 5,967	1947..... 3,342	1957..... 5,603	1967.... *5,884	1977.... *3,506
1928 ... *2,097	1938..... 1,795	1948..... 5,316	1958..... 2,554	1968.... *6,594	1978.... *3,019
1929 ... 4,267	1939..... 3,756	1949..... 2,881	1959..... 6,818	1969.... *7,851	1979.... *4,170
1930 ... *2,069	1940..... 2,343	1950..... 4,473	1960..... 8,006	1970.... *4,979	1980.... *4,097
1931 ... 2,116	1941..... 4,538	1951..... 5,696	1961..... 6,213	1971.... *4,604	1981.... *1,663
1932 ... 1,895	1942..... 3,449	1952..... 5,101	1962..... 5,242	1972.... *4,273	1982.... *2,345

*California only.

CALIFORNIA PACK OF APRICOTS BY SIZE OF CONTAINER

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
24/2½	568	636	189	238	108	318	181	39	119	95
24/8 oz.	646	438	171	259	200	306	209	51	206	199
24/303 & 300	1,637	1,545	602	1,106	794	1,309	881	397	994	1,011
6/10	1,267	1,442	648	731	516	771	858	244	587	709
Misc.	53	38	54	11	74	.....	.....	.....	.....	.....
Total a/c	4,170	4,097	1,663	2,345	1,692	2,704	2,129	731	1,906	2,014
Tot. Bas. 2½'s	2,887	2,994	1,208	1,626	1,167	1,861	1,532	505	1,281	1,381

STYLE - 1982 pack (1983 in parentheses) thousands of actual cases - Halves - 2,187 (1,555); Whole Peeled - 88 (69); Whole Unpeeled - 70 (68). Report discontinued in 1984 to avoid disclosure.

APRICOTS—CARRYOVER—PACK—STOCKS—SHIPMENTS

(Thousands of Actual Cases—Figures Rounded, Season beginning year shown)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Carryover 6/1	419	1,056	1,527	381	316	153	724	476	55	206
Pack	4,170	4,097	1,663	2,345	1,692	2,704	2,129	731	1,906	2,014
Canner Supply ..	4,590	5,153	3,190	2,726	2,008	2,857	2,853	1,207	1,961	2,220
CANNER SHIPMENTS										
6/1 - 12/1	2,004	2,087	1,637	1,375	1,227	1,246	1,310	829	1,015	995
12/1 - 3/1	714	763	607	558	335	435	556	224	380	395
3/1 - 6/1	816	777	565	477	292	452	511	99	360	P
Total Shipments...	3,534	3,626	2,809	2,410	1,854	2,133	2,377	1,152	1,755	P
CANNER STOCKS										
Dec. 1	2,585	3,066	1,553	1,351	781	1,611	1,543	378	946	1,235
Mar. 1	1,872	2,304	946	793	445	1,176	987	154	566	830
June 1	1,056	1,527	381	316	153	724	476	55	206	P
EXPORTS*	89	51	59.1	54.5	37.6	19.5	19.1	15.8	23.3	44.1
GOV. PURCHASES*										
Armed Forces ...	57.8	62.6	20.8	38.6	5.7	4.5	34.5	13.2	20.3	23.5
U.S.D.A.	419.0	312.8	.....	16.0	.....	474.4	13.5	.....	.....	.....
Vet. Adm.	26.3	15.1	*15.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

*Basis 1,000 cases 24/2½, calendar year for exports.

*Estimate.

P - Not available at press time.

U.S. PACKS OF RED TART PITTED CHERRIES*

Source: National Food Processors Association. With Permission.
All figures refer to thousands of Actual Cases, all size containers.

1929	1,124	1939	3,155	1947	2,397	1955	4,902	1963	1,314	1971	1,477
1931	1,498	1940	3,423	1948	3,552	1956	2,749	1964	4,812	1972	1,631
1933	1,725	1941	2,064	1949	3,445	1957	3,604	1965	3,166	1973	765
1934	1,855	1942	3,062	1950	5,023	1958	2,746	1966	1,258	1974	1,592
1935	2,563	1943	562	1951	4,672	1959	4,128	1967	1,077	1975	1,639
1936	1,450	1944	3,072	1952	3,892	1960	2,219	1968	1,600	1976	550
1937	2,472	1945	1,326	1953	3,849	1961	3,139	1969	2,112	1977	772
1938	1,695	1946	3,086	1954	3,086	1962	4,224	1970	1,392	1978	735

PACK OF RP CHERRIES BY AREA AND SIZE OF CONTAINER

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
East	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Midwest	62 ^a	635	277	546	232	489	474	332	605	511
West	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total U.S.	718	707	315	642	299	580	592	390	712	609
Total Bas. 2½'s	526	545	213	471	189	389	390	253	474	434
24/303 & 300	385	301	218	336	243	406	437	299	510	355
6/10	333	407	97	306	56	173	(a)	(a)	202	(a)
Misc.							154	91		254

*Does not include pie filling. n.a. - In total (a) Included in "Misc."

U.S. PACKS OF CANNED SWEET CHERRIES

Source: National Food Processors Association & Northwest Food Processors Assn.

All figures refer to thousands of Actual Cases, all size containers

1923	(a)990	1933	(a)860	1943	912	1953	1,755	1963	876	1973	796
1924	(a)596	1934	526	1944	932	1954	1,683	1964	1,678	1974	983
1925	(a)609	1935	535	1945	1,415	1955	2,318	1965	1,241	1975	648
1926	1,236	1936	570	1946	2,082	1956	1,216	1966	1,025	1976	717
1927	568	1937	519	1947	680	1957	1,684	1967	1,314	1977	774
1928	914	1938	730	1948	1,067	1958	1,659	1968	898	1978	766
1929	1,017	1939	1,073	1949	2,311	1959	1,104	1969	1,622	1979	973
1930	(a)1,202	1940	630	1950	1,146	1960	1,094	1970	1,065	1980	615
1931	406	1941	934	1951	1,421	1961	1,847	1971	861	1981	461
1932	(a)522	1942	1,022	1952	2,100	1962	1,839	1972	621	1982	716

(a) West only.

PACK OF SWEET CHERRIES BY AREA AND SIZE OF CONTAINER

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Northwest	751	439	336	566	549	391	426	352	511	488
Other States ¹	222	176	125	150	210	150	162	115	152	145
Total U.S.	973	615	461	716	759	542	588	466	663	634
Total Bas. 2½'s	651	428	316	498	496	357	405	327	451	439
24/2½	21	21	11	19	18	15	18	13	15	23
24/8 oz.	30	17	5	20	11	m	(m)	(m)	(m)	(m)
24/303 ^a	649	368	301	423	551	375	360	279	420	377
6/10	270	205	135	249	174	135	193	161	214	213
Misc.	2	4	9	4	5	16	17	14	18	20

¹ Michigan and New York thru 1980; Michigan only 1981-1983. Midwest thereafter.

*Includes 24/300's and 24/1 Tall.

(m) - Included in "Misc."

CALIFORNIA PACK OF FRUIT COCKTAIL

Compiled by the California League of Food Processors and Cling Peach Advisory Board
Thousands of Actual Cases, Figures Rounded

1934	1,168	1942	5,484	1950	8,570	1958	16,762	1966	24,839	1974	22,211
1935	1,650	1943	5,653	1951	10,743	1959	18,730	1967	21,335	1975	20,236
1936	2,157	1944	6,302	1952	10,971	1960	19,936	1968	26,170	1976	20,234
1937	3,152	1945	6,112	1953	12,137	1961	20,949	1969	26,039	1977	19,601
1938	1,942	1946	7,832	1954	13,461	1962	20,821	1970	19,481	1978	17,428
1939	3,563	1947	9,082	1955	14,886	1963	19,147	1971	20,562	1979	20,222
1940	4,189	1948	11,219	1956	17,485	1964	24,750	1972	17,738	1980	21,163
1941	4,989	1949	6,995	1957	16,690	1965	22,410	1973	20,030	1981	16,822

FRUIT COCKTAIL PACKS BY SIZE OF CONTAINER

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
24/2½*	4,015	4,385	3,302	2,274	2,299	2,525	2,467	2,391	2,435	2,551
24/8 oz.	2,327	2,006	1,452	1,421	1,017	1,338	1,339	1,410	1,581	1,782
24/300 & 303	10,258	10,445	9,690	6,921	6,388	6,298	7,033	6,382	6,988	7,724
6/10	3,622	4,327	2,378	2,302	2,180	2,386	3,486	2,782	2,697	2,469
Total	20,222	21,163	16,822	12,918	11,884	12,547	14,325	12,965	13,701	14,526
Tot. Basis 2½'s	13,815	14,826	11,383	8,722	8,223	8,671	10,058	8,976	9,344	9,724

*To avoid disclosure, packs in sizes not shown have been converted to 2½'s and included with that size.

CALIFORNIA PACKS OF FRUITS FOR SALAD AND MIXED FRUITS

Thousands of Actual Cases, Figures Rounded

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
24/8 oz.	171	143	53	59	*	*	*	*	*	*
24/300 & 303	2,935	2,146	1,571	2,004	926	1,985	1,865	1,180	1,661	1,695
24/2½*	447	521	521	250	253	418	394	289	335	156
6/10	1,061	1,554	1,210	1,078	603	1,040	1,144	960	1,250	1,040
Tot actual cases	4,613	4,364	3,355	3,391	1,782	3,443	3,403	2,429	3,246	2,891
Tot basis 24/2½	3,145	3,215	2,545	2,401	1,335	2,506	2,509	1,845	2,433	2,306

*To avoid disclosure, packs in sizes not shown have been converted to 2½'s and included with that size.
*No. 2½ salad pack converted to 10's and included with that size.

FLORIDA PACK OF GRAPEFRUIT SEGMENTS

Compiled by Florida Citrus Processors Association

Thousands of Actual Cases, Figures Rounded—Pack year beginning Oct. 1 of year shown.

1925	88	1937	3,655	1945	2,272	1953	5,070	1961	4,621	1969	3,906
1927	455	1938	4,229	1946	5,586	1954	6,081	1962	3,110	1970	3,841
1929	1,175	1939	4,073	1947	3,426	1955	5,483	1963	3,589	1971	3,113
1931	1,599	1940	3,153	1948	4,464	1956	5,001	1964	4,290	1972	2,952
1933	2,398	1941	4,410	1949	3,414	1957	4,650	1965	4,603	1973	3,349
1934	3,748	1942	897	1950	4,751	1958	5,072	1966	5,448	1974	2,436
1935	2,411	1943	985	1951	3,819	1959	4,375	1967	4,011	1975	1,710
1936	4,279	1944	485	1952	4,407	1960	4,766	1968	3,983	1976	1,873

*1925-1961 are U.S. Total figures.

PACK OF GRAPEFRUIT BY SIZE OF CONTAINER

	1973	1974	1975	1976	1977	1978	1979	1980	1981	*1982
24/8 oz.	284	174	82	157	163	158	83 ¹	42 ¹	63 ¹	(a)
24/303	2,623	1,888	1,323	1,387	1,422	1,442	1,543	1,282	1,042	1,053
12/3 Cyl	442	374	305	326	324	368	407	387	283	234
Misc.	.....	.....	.....	2	3	.....	.....	.....	.....	.....
Total	3,349	2,436	1,710	1,873	1,912	1,969	2,033	1,711	1,388	1,287

*Reports discontinued 1983-84 season. ¹Basis 48/8 oz. (a) 48/8 oz. included in 303's.

U.S. PACKS BLENDED GRAPEFRUIT & ORANGE JUICE

Thousands of Actual Cases, Figures Rounded — Pack beginning year shown.

1935.....81	1943.....5,563	1951.....5,615	1959.....3,766	1967.....1,809	1975.....2,363
1936.....266	1944.....7,016	1952.....5,263	1960.....2,644	1968.....2,141	1976.....1,262
1937.....526	1945.....11,800	1953.....5,577	1961.....3,288	1969.....1,984	1977.....1,557
1938.....676	1946.....9,076	1954.....4,353	1962.....2,635	1970.....2,046	1978.....1,138
1939.....1,301	1947.....10,568	1955.....4,580	1963.....2,135	1971.....1,626	1979.....1,279
1940.....2,285	1948.....9,457	1956.....4,492	1964.....2,084	1972.....1,710	1980.....860
1941.....2,043	1949.....6,492	1957.....4,140	1965.....2,384	1973.....1,573	1981.....673
1942.....3,108	1950.....8,269	1958.....3,624	1966.....3,063	1974.....1,363	

*FLORIDA PACK OF CANNED BLENDED JUICE

Compiled by Florida Citrus Processors Association

	1980	1981	1982	1983	1984	1985	1986	1987
24/12 oz.....	.....	.....	.....	.....	.....	.....	.....	.....
48/6 oz.....	23	21	11	17	20	29	33	18
12/3 cyl.....	758	558	503	426	471	437	400	342
Other (basis 24/2's).....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	781	579	514	442	491	465	433	360
Total basis 24/2's... ..	984	727	650	555	615	477	533	449
Swtnd (basis 24/2's).....	23	19	8	7	6	4	3	.....
UnSwt (basis 24/2's).....	961	708	643	548	609	572	531	449

U.S. PACKS OF GRAPEFRUIT JUICE

Thousands of Actual Cases, Figures Rounded — Pack beginning year shown.

1929.....116	1940.....14,071	1949.....10,795	1958.....9,938	1967.....14,063	1976.....25,921
1931.....287	1941.....11,051	1950.....16,298	1959.....9,862	1968.....17,207	1977.....25,505
1933.....740	1942.....20,061	1951.....8,469	1960.....9,566	1969.....20,080	1978.....24,451
1934.....2,556	1943.....22,637	1952.....10,515	1961.....9,811	1970.....23,854	1979.....24,223
1935.....2,236	1944.....19,261	1953.....14,638	1962.....8,380	1971.....24,891	1980.....19,303
1936.....6,016	1945.....22,483	1954.....11,041	1963.....5,662	1972.....25,987	1981.....21,383
1937.....8,022	1946.....15,173	1955.....12,814	1964.....9,741	1973.....26,579	
1938.....9,199	1947.....14,869	1956.....13,535	1965.....12,215	1974.....20,158	
1939.....9,657	1948.....12,803	1957.....9,335	1966.....18,377	1975.....24,544	

*FLORIDA PACK OF CANNED GRAPEFRUIT JUICE

	1980	1981	1982	1983	1984	1985	1986	1987
24/12 oz.....	756	793	709	734	706	718	543	208
48/6 oz.....	5,036	4,827	3,897	3,452	3,807	3,701	3,552	3,158
12/3 cyl.....	8,019	9,355	6,688	5,234	5,891	5,443	4,849	4,108
Other (basis 24/2's).....	119	20	31	32	13	44	53	229
Total.....	13,931	14,996	11,325	9,452	10,417	9,906	8,998	7,702
Total basis 24/2's... ..	14,231	15,725	11,651	9,513	10,552	9,948	8,982	7,724
Swtnd (basis 24/2's).....	422	389	352	224	364	267	219	171
UnSwt (basis 24/2's).....	13,810	15,336	11,299	9,288	10,188	9,680	8,763	7,552

U.S. PACKS OF ORANGE JUICE

Thousands of Actual Cases, Figures Rounded—Pack beginning year shown.

1939.....3,578	1946.....17,135	1953.....17,491	1960.....13,169	1967.....12,551	1974.....13,011
1940.....4,012	1947.....23,993	1954.....18,771	1961.....16,146	1968.....15,691	1975.....13,262
1941.....4,406	1948.....18,039	1955.....17,953	1962.....13,367	1969.....17,082	1976.....14,187
1942.....2,703	1949.....17,667	1956.....20,059	1963.....10,639	1970.....16,966	1977.....16,166
1943.....7,372	1950.....20,871	1957.....18,562	1964.....13,496	1971.....15,927	1978.....18,305
1944.....14,229	1951.....19,126	1958.....15,868	1965.....14,145	1972.....17,506	1979.....19,622
1945.....19,397	1952.....17,822	1959.....18,022	1966.....17,629	1973.....14,615	1980.....19,146
					1981.....15,956

*FLORIDA PACK OF CANNED ORANGE JUICE

	1980	1981	1982	1983	1984	1985	1986	1987
24/12 oz.....	1,550	1,542	1,544	1,363	1,089	1,097	1,019	252
48/6 oz.....	6,112	5,578	4,756	4,290	3,699	3,394	3,458	3,115
12/3 cyl.....	6,031	5,226	4,310	4,080	3,285	3,526	3,949	3,522
Other (basis 24/2's).....	195	75	91	99	34	95	88	509
Total.....	13,887	12,421	10,702	9,832	8,107	8,111	8,515	7,398
Total basis 24/2's... ..	13,012	11,503	9,802	9,084	7,425	7,596	8,122	7,256
Swtnd (basis 24/2's).....	1,093	687	635	566	518	525	478	416
UnSwt (basis 24/2's).....	11,919	10,817	9,167	8,518	6,907	7,071	7,644	6,840

*Florida only. Season beginning year shown. Thousands of cases. Source: Florida Citrus Processors Association.

U.S. PACKS OF PEACHES†

Source: National Food Processors Association. With Permission.
California figures compiled by California League of Food Processors and the Cling Peach Advisory Board.

Thousands of Actual Cases - Figures Rounded - Season beginning year shown

1923 ... 7,466	1933 ... 10,576	1943 ... 11,450	1953 ... 25,557	1963 ... 38,113	1973 ... 29,943
1924 ... 6,331	1934 ... 8,936	1944 ... 14,036	1954 ... 22,118	1964 ... 43,951	1974 ... 39,695
1925 ... 10,755	1935 ... 11,747	1945 ... 14,675	1955 ... 27,357	1965 ... 34,457	1975 ... 34,980
1926 ... 14,482	1936 ... 11,183	1946 ... 20,755	1956 ... 34,092	1966 ... 42,950	1976 ... 30,465
1927 ... 11,836	1937 ... 13,880	1947 ... 19,496	1957 ... 29,776	1967 ... 32,041	1977 ... 35,921
1928 ... 14,975	1938 ... 10,400	1948 ... 18,644	1958 ... 29,808	1968 ... 45,822	1978 ... 26,786
1929 ... 8,724	1939 ... 12,116	1949 ... 21,443	1959 ... 35,225	1969 ... 45,700	1979 ... 32,685
1930 ... 13,803	1940 ... 11,464	1950 ... 18,576	1960 ... 36,016	1970 ... 34,290	1980 ... 32,744
1931 ... 8,752	1941 ... 14,778	1951 ... 25,826	1961 ... 36,537	1971 ... 31,514	1981 ... 27,351
1932 ... 6,633	1942 ... 16,726	1952 ... 22,727	1962 ... 38,846	1972 ... 29,321	1982 ... 23,581

† Spiced Peaches not included.

PACKS OF PEACHES BY TYPE AND SIZE OF CONTAINER

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
CLINGSTONE - California										
24/8Z	2,551	1,596	1,489	1,320	1,056	1,372	1,221	1,257	1,378	1,634
24/300-303....	8,966	8,693	8,753	7,758	5,992	9,304	7,363	6,593	8,143	8,995
24/2½	11,119	11,487	9,304	7,242	3,346	6,450	6,552	5,506	4,966	5,800
6/10	7,756	8,847	6,487	6,332	3,945	7,133	6,799	5,278	5,257	6,382
Misc.					(a)	(a)	(a)	(a)	(a)	(a)
Tot. a/c	30,391	30,624	26,033	22,652	14,339	24,259	21,935	18,634	19,744	22,811
Tot. Basis 2½ ..	24,053	24,990	20,658	17,846	10,686	18,687	17,352	14,465	14,829	17,263
FREESTONE - All States										
24/8Z		2	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
24/300-303....	811	641	395	(m)	441	521	499	(m)	501	465
24/2½	1,070	1,130	515	(m)	290	368	650	639	683	793
6/10	194	282	(m)	(m)	195	(m)	(m)	(m)	(m)	(m)
Misc.	219	66	408	929	37	202	161	611	122	242
Tot. a/c	2,294	2,120	1,318	929	965	1,090	1,310	1,250	1,307	1,500
Tot. Basis 2½ ..	1,787	1,774	1,105	799	731	825	1,049	1,041	1,069	1,249
ALL PEACHES										
Tot. a/c	32,685	32,744	27,351	23,581	15,304	25,349	23,245	13,884	21,051	24,311
Tot. Basis 2½ ..	25,840	26,765	21,763	18,645	11,417	19,512	18,401	15,506	15,898	18,512

(m) In Miscellaneous. (a) Packs of misc. sizes may be included with 2½'s to avoid disclosure of confidential information.

CANNED PEACHES—CARRYOVER—PACK—STOCKS—SHIPMENTS

Thousands of Actual Cases — Figures Rounded. Season beginning year shown

	1979	1980	1981	1982	†1983	†1984	†1985	†1986	†1987	†1988
CARRYOVER										
6/1-12/1	4,773	6,951	9,359	10,484	7,034	1,729	5,847	7,232	4,073	1,913
Pack	32,685	32,744	27,351	23,581	14,339	24,259	21,935	18,634	19,744	22,811
Canner Supply ..	37,458	39,695	36,710	34,066	21,373	25,988	27,782	25,866	23,817	24,724
CANNER SHIPMENTS										
6/1-12/1	17,051	16,231	12,607	13,927	11,933	10,399	9,000	10,991	12,160	11,116
12/1-3/1	6,500	6,366	6,488	6,699	3,825	4,933	5,236	5,490	5,190	5,316
3/1-6/1	6,956	7,739	7,131	6,175	3,885	4,809	6,314	5,312	4,554	P
Total Ship	30,506	30,336	26,226	26,801	19,644	20,141	20,550	21,793	21,904	P
CANNER STOCKS										
Dec. 1	20,407	23,464	24,103	20,139	9,440	15,589	18,782	14,875	11,657	13,608
Mar. 1	13,907	17,098	17,616	13,440	5,615	10,656	13,546	9,385	6,467	8,292
June 1	6,951	9,359	10,484	7,265	1,729	5,847	7,232	4,073	1,913	P
EXPORTS**										
GOVMT. PURCHASES**	2,622	2,818	2,689	1,885	1,329	675	511	876	761	903
ARMED Forces ..	251.5	271.1	148.6	142.5	138.2	116.2	162.1	135.0	95.5	149.4
USDA	850.2	1,196.0	1,881.9	1,482.7	809.3	705.0	606.5	703.7	756.8	377.7
Vet Admin	51.5	38.4	40.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

**Basis 1,000 cases 24/2½. Calendar year for Exports. n.a. - Not available.
only. Not comparable to years prior to 1983. P - Not available at press time.

† California clingstone

U.S. PACKS OF PEARS

Compiled by Economics & Statistics Div., Nat'l. Food Processors Assn.;
beginning in 1981 by the Northwest Food Processors Assn. and the California League of Food Processors.

Thousands of Actual Cases, Figures Rounded

1923 ...	*1,837	1933.....	4,997	1943.....	4,648	1953.....	7,923	1963.....	7,572	1973....	13,641
1924 ...	*2,205	1934.....	6,163	1944.....	4,802	1954.....	10,717	1964.....	15,287	1974....	14,937
1925 ...	4,108	1935.....	4,944	1945.....	4,625	1955.....	11,516	1965.....	8,509	1975....	13,152
1926 ...	*3,418	1936.....	6,365	1946.....	5,547	1956.....	12,086	1966.....	15,264	1976....	15,541
1927 ...	3,061	1937.....	5,411	1947.....	5,986	1957.....	11,725	1967.....	8,142	1977....	13,511
1928 ...	*4,315	1938.....	5,198	1948.....	4,744	1958.....	10,566	1968.....	14,320	1978....	12,297
1929 ...	4,981	1939.....	5,102	1949.....	6,924	1959.....	12,679	1969.....	14,736	1979....	14,336
1930 ...	4,594	1940.....	6,028	1950.....	8,139	1960.....	11,483	1970.....	11,680	1980....	14,474
1931 ...	3,932	1941.....	7,166	1951.....	9,003	1961.....	12,098	1971.....	14,154	1981....	13,012
1932 ...	3,672	1942.....	6,423	1952.....	8,187	1962.....	12,684	1972.....	12,299	1982....	10,419

*West only.

PACK OF PEARS BY STATE AND SIZE OF CONTAINER

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Northwest.....	9,956	9,798	9,200	8,080	9,752	10,415	10,481	9,719	12,387	12,410
California.....	4,380	4,676	3,812	2,339						
Total U.S. A/C...	14,336	14,474	13,012	10,419	9,752	10,415	10,481	9,719	12,387	12,410
Tot. Bas. 2½.....	10,568	10,928	9,700	7,789	7,214	7,657	7,813	7,209	9,125	9,169
24/8Z.....	1,462	1,064	925	826	693	892	830	787	989	983
24/303*.....	5,482	5,515	5,352	4,016	4,120	4,343	4,121	3,883	5,101	4,987
24/2½.....	2,892	2,689	2,342	1,639	1,688	1,769	1,895	1,700	1,877	1,677
6/10.....	4,501	5,206	4,393	3,938	3,232	3,398	3,617	3,334	4,403	4,741
Miscellaneous....	.....	.....	.....	.....	19	13	18	15	17	22

*Includes 300 and No. 1 Tall.

U.S PACKS OF PURPLE PLUMS

Compiled by Economics & Statistics Div., Nat'l Food Processors Assn. & Northwest Food Processors Assn.

Thousands of Actual Cases, Figures Rounded

1934	1,035	1942.....	1,085	1950.....	1,018	1958.....	1,531	1966.....	1,730	1974.....	1,488
1935	1,695	1943.....	1,760	1951.....	2,603	1959.....	1,974	1967.....	2,163	1975.....	1,697
1936	1,818	1944.....	1,117	1952.....	1,735	1960.....	456	1968.....	871	1976....	1,243
1937	1,617	1945.....	1,647	1953.....	1,467	1961.....	1,959	1969.....	2,651	1977.....	1,032
1938	704	1946.....	3,576	1954.....	1,835	1962.....	2,402	1970.....	977	1978.....	1,128
1939	2,213	1947.....	1,851	1955.....	1,930	1963.....	1,380	1971.....	1,442	1979.....	896
1940	1,161	1948.....	937	1956.....	2,540	1964.....	1,794	1972.....	461	1980.....	1,305
1941	1,948	1949.....	1,806	1957.....	1,200	1965.....	1,996	1973.....	1,564	1981.....	1,157

PURPLE PLUM PACKS BY STATE & SIZE OF CONTAINER

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Northwest.....	444	826	707	333	228	423	516	491	385	524
Michigan.....	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Other States.....	452	480	461	146	321	303	280	141	205	186
Total U.S.	896	1,305	1,157	479	549	726	796	778	590	710
Tot Basis 24/2½'s	711	1,066	940	375	443	577	642	632	488	592
24/8Z.....	34	26	27	(a)	(a)	(a)	(a)	(a)	(a)	(a)
24/303*.....	311	414	358	178	184	263	261	260	172	196
24/2½.....	213	354	232	82	90	114	99	134	110	115
6/10.....	338	511	540	204	268	338	426	381	304	397
Miscellaneous....	.....	.....	.....	15	6	11	10	3	4	1

*Includes 300 and No. 1 Tall. (a) Included in Other States or Miscellaneous.

U.S. PACKS OF CANNED FISHERY PRODUCTS

Source: National Marine Fisheries Service, N.O.A.A., U.S. Department of Commerce

Thousands of Pounds—Figures Rounded

1933.....	518,996	1944.....	658,660	1955.....	843,696	1966.....	1,187,547	1977.....	1,421,295
1934.....	681,304	1945.....	646,386	1956.....	977,763	1967.....	1,189,392	1978.....	1,597,329
1935.....	647,642	1946.....	699,378	1957.....	987,602	1968.....	1,267,025	1979.....	1,439,080
1936.....	769,573	1947.....	754,129	1958.....	1,094,602	1969.....	1,168,281	1980.....	1,516,097
1937.....	717,270	1948.....	782,208	1959.....	969,135	1970.....	1,345,891	1981.....	1,476,198
1938.....	649,413	1949.....	855,015	1960.....	1,083,418	1971.....	1,328,816	1982.....	1,294,306
1939.....	688,270	1950.....	967,115	1961.....	1,042,740	1972.....	1,596,830	1983.....	1,390,795
1940.....	681,194	1951.....	800,509	1962.....	1,133,710	1973.....	1,647,357	1984.....	1,410,750
1941.....	885,962	1952.....	809,495	1963.....	1,035,909	1974.....	1,554,006	1985.....	1,161,146
1942.....	660,342	1953.....	792,194	1964.....	1,095,566	1975.....	1,382,428	1986.....	1,331,921
1943.....	620,880	1954.....	862,523	1965.....	1,121,629	1976.....	1,565,157	1987.....	1,185,664

PACK & VALUE CANNED FISHERY PRODUCTS BY SPECIES

FOR HUMAN CONSUMPTION

Thousands of Standard Cases—Thousands of Dollars

	Pounds Per Case	1982	1983	1984	1985	1986	1987	†1988
Gefiltefish.....	48	278	258	245	469	488	492	510
Value.....		14,334	13,630	13,487	13,702	19,045	20,623	19,750
Herring.....	48	119	80	119	62	141	157	90
Value.....		9,312	6,316	9,429	5,599	11,000	12,632	6,032
Mackerel.....	45	872	1,025	682	341	376	325	402
Value.....		14,919	16,515	13,372	6,614	6,596	5,777	8,777
Roe & Caviar.....	48	9	9	8	17	16	11	10
Value.....		1,673	1,700	1,691	3,356	3,505	2,730	3,019
Salmon.....	48	2,507	3,774	4,167	3,311	2,953	2,192	1,826
Value.....		199,013	307,475	321,913	227,635	265,088	261,924	216,834
Salmon Specialties.....	48	2	3	130	5	6	3	2
Value.....		688	695	7,496	1,020	1,277	806	675
Sardines, Maine.....	23.4	769	560	626	855	668	561	796
Value.....		28,304	20,134	24,784	37,784	27,736	22,420	24,082
Tuna.....	*19.5	27,067	29,941	31,511	27,951	32,663	33,539	30,678
Value.....		918,446	858,597	872,277	820,769	881,518	1,016,443	960,209
Tuna Specialties.....	48	28	19	311	127	259	(b)	(b)
Value.....		1,478	659	10,978	4,460	14,378	44	46
Other Fish.....	48	260	213	223	181	486	308	216
Value.....		11,190	11,198	12,046	9,654	10,477	12,896	1,259
Total Fish.....		31,931	35,882	38,023	33,320	38,055	37,586	34,530
Value.....		1,199,357	1,236,819	1,287,473	1,130,593	1,240,620	1,356,295	1,250,683
Clams ¹	15	1,082	1,403	1,464	1,668	1,432	1,282	1,827
Value.....		35,565	39,225	43,179	53,420	50,330	35,516	42,076
Clam Chowder & Juice.....	30	2,757	2,717	2,565	2,484	2,733	2,959	3,036
Value.....		49,659	46,700	41,477	42,281	56,092	45,796	48,506
Clam Specialties.....	48	176	140	308	364	267	182	190
Value.....		10,526	9,197	10,483	13,617	11,194	6,585	6,938
Crabs, Natural.....	19.5	124	74	56	28	30	10	18
Value.....		12,723	6,184	4,730	1,713	2,392	936	1,745
Lobster & Specialties.....	48	n.a.	n.a.	n.a.	19	19	18	21
Value.....		n.a.	n.a.	n.a.	1,238	1,270	1,030	991
Oysters ³	7	116	137	(a)	(a)	(a)	(a)	(a)
Value.....		2,222	2,307	(a)	(a)	(a)	(a)	(a)
Oyster Specialties.....	48	207	122	119	46	70	78	64
Value.....		5,865	6,049	5,246	1,797	3,790	2,497	2,059
Shrimp ⁴	6.75	1,176	996	1,073	593	681	649	663
Value.....		45,008	41,415	36,242	18,959	23,187	22,429	24,898
Shrimp Specialties.....	48	21	28	29	25	19	19	26
Value.....		859	1,260	1,381	1,161	952	988	1,774
Other Shellfish.....	48	*218	60	*65	*136	*129	97	156
Value.....		5,312	4,448	5,572	4,532	4,705	4,407	5,322
Total Shellfish.....		5,877	5,677	5,679	5,363	5,380	5,295	6,000
Value.....		167,739	156,785	148,310	138,718	153,912	120,184	134,309
Total Human Consumption.....		37,808	41,559	43,702	38,683	43,435	42,881	40,530
Value.....		1,367,096	1,393,604	1,435,783	1,269,311	1,394,532	1,476,479	1,384,992
Total Bait & Animal Food.....	48	8,484	8,406	7,690	5,168	6,687	4,597	4,644
Value.....		132,048	140,874	141,931	91,003	100,377	85,416	92,722
Total All - Cases (000's).....		46,292	49,964	51,392	43,852	50,122	47,478	45,174
Value (000's).....		1,499,144	1,534,478	1,577,714	1,360,314	1,494,909	1,561,896	1,477,714
Pounds (000's).....		1,294,306	1,390,795	1,410,750	1,161,146	1,331,921	1,185,664	1,130,414

† Preliminary. * Flakes & Graded Tuna 18 lbs. per case. Prior to 1984 solid pack basis 21 lbs. per case.
 (a) Included with Specialties. (b) Less than 500 cases. ¹ Whole & Minced Clams. Drained Weight.
² Includes Specialties. ³ Drained Weight. ⁴ Includes crab specialties as follows: 1984-2,918; 1985-8,836;
 1986-10,206, and squid as follows: 1982-159,965; 1985-76,246.

U.S. PACKS OF CANNED FISHERY PRODUCTS—Continued

PACK AND VALUE OF CANNED FISHERY PRODUCTS BY STATE**

Source: U.S. Dept. of Commerce, NOAA, National Marine Fisheries Service.

Thousands of Standard Cases and Dollars—Figures Rounded

State/Area and No. of plants (1977)-1986	1979	1980	1981	1982	1983	1984	1985	1986
New Eng. (20)-13 ¹ Pack	2,157	1,841	2,261	1,753	1,370	1,462	1,622	1,354
Value	70,622	64,352	80,572	66,433	52,517	58,167	67,955	53,497
Mid-Atlantic (26)-23 Pack	2,814	2,874	3,256	3,897	4,200	4,493	4,806	6,782
Value	74,248	77,382	85,785	97,347	97,905	106,882	117,568	143,121
New York (5)-3 Pack	108	149	145	99	101	34	44	(d)
Value	4,776	6,046	6,277	4,663	4,769	2,698	2,919	(d)
New Jersey (12)-10 Pack	1,387	1,388	1,478	1,727	1,621	1,852	1,927	3,765
Value	40,843	41,697	43,122	48,377	47,164	54,446	54,036	78,067
Pennsylvania (3)-3 Pack	1,319	1,337	1,532	1,938	589	554	619	894
Value	28,629	29,639	35,032	42,491	12,680	12,245	15,091	17,065
Delaware (2)-3 Pack	(p)	(p)	(p)	(p)	1,889	1,875	2,216	1,932
Value	(p)	(p)	(p)	(p)	33,322	34,757	45,522	44,733
Maryland (1)-1 . . . . .	.....	.....	.....	.....	(v)	(v)	(p)	(v)
Virginia (3)-2 Pack	(p)	(p)	101	133	(v)	178	(p)	191
Value	(p)	(p)	1,354	1,816	(v)	2,736	(p)	3,256
S.E. & Gulf (26)-16 Pack	4,452	4,828	3,843	3,977	3,424	2,866	2,161	2,780
Value	59,645	87,530	65,195	64,719	73,048	58,444	38,650	52,209
NC (3)-3 & SC (2)-2 Pack	112	206	145	131	139	77	51	50
Value	5,533	9,489	7,389	7,073	7,425	5,654	2,730	3,190
Florida (2)-	(l)	(cm)	(cm)	(cm)	(cm)	(m)	(m)	(m)
Texas (0)- . . . . .	.....	.....	.....	.....	(m)	(m)	(m)	(m)
Louisiana (12)-7 Pack	814	1,498	957	658	901	678	417	515
Value	26,953	48,970	31,580	24,870	31,354	24,127	12,220	16,990
Mississippi (7)-4 Pack	3,526	3,124	2,741	3,188	2,384	2,111	1,692	2,216
Value	27,159	29,071	26,226	32,776	34,269	28,663	23,700	32,029
Midwest (5)-2 ² Pack	4	5	67	203	94	92	55	(i)
Value	97	352	745	2,638	1,177	1,165	913	(i)
West Coast (133)-120 Pack	22,977	25,720	23,906	18,186	19,760	14,903	6,627	5,851
Value	869,826	1,034,441	1,011,727	618,382	708,275	594,440	296,056	332,981
Alaska (62)-80 Pack	3,816	4,681	4,575	2,438	3,792	4,463	3,189	2,925
Value	286,986	401,377	384,137	170,458	306,259	327,140	213,612	259,748
California (17)-5 Pack	17,502	20,841	18,840	15,339	15,697	9,710	2,829	2,715
Value	536,504	620,489	599,424	429,390	387,577	247,352	67,934	63,794
Oregon (11)-3 Pack	1,172	2	39	36	3	444	404	1
Value	29,678	308	1,155	1,461	265	7,068	6,866	135
Washington (43)-19 Pack	487	196	452	373	268	286	206	210
Value	16,658	12,267	27,011	17,073	14,174	12,880	7,644	9,304
Islands (8)-7 ³ Pack	19,628	18,292	19,729	17,805	21,116	27,086	25,581	33,322
Value	668,393	663,599	709,947	607,964	601,556	757,117	839,172	902,782
Total (218)-169 Pack	52,032	53,561	53,062	45,820	49,964	50,956	43,552	50,095
Value	1,743,331	1,927,656	1,953,971	1,457,483	1,534,478	1,577,463	1,360,314	1,484,590
Total Fish & Pack	36,988	37,072	39,162	31,761	35,882	37,534	33,320	38,054
Fish Spec. Value	1,443,133	1,596,285	1,659,703	1,174,316	1,236,819	1,285,974	1,130,593	1,240,608
Total Shellfish Pack	5,049	5,930	5,384	5,576	5,677	5,732	5,363	5,355
& Spec. Value	149,882	185,663	159,706	151,119	156,785	149,558	138,718	143,606
Total Human Pack	42,037	43,002	44,546	37,337	41,558	43,266	38,683	43,408
Consumption Value	1,593,015	1,781,948	1,819,409	1,325,435	1,393,604	1,435,532	1,269,311	1,384,213
Total Animal Pack	9,995	10,559	8,516	8,484	8,406	7,690	5,168	6,687
Food & Bait. Value	150,316	145,708	134,562	132,048	140,874	141,931	91,003	100,377
TOTAL NO. PLANTS	163	158	186	193	175	180	186	169

¹ Number of plants: CT (0)-1; ME (18)-12; MA (2)-0. ² Number of plants: MI (2)-2; WI (3)-1. ³ Number of plants: Hawaii (1)-0; Puerto Rico (5)-5; Amer. Samoa (2)-2. Data includes production and value of 2 plants in Michigan for 1986. (p) Included in PA. (d) Included in Delaware. (i) Included with Islands. (v) Included in VA. (m) Included in MS. (l) Included in LA. (cm) Florida east coast included with Carolinas, West Coast included in MS. *Totals revised. State and area data will not add to totals due to minor corrections not available by state to prevent disclosure of individual operations. **Data does not agree with packs of Canned Fishery Products by Species appearing elsewhere in this Almanac as final data revisions by state are not available. Discrepancies are generally minor.

FACTORS USED TO CONVERT STANDARD CASES TO POUNDS (1943 to present): Salmon 48 lbs.; Sardines (Me.) 23.4 lbs. (20.3 lbs. 1942-1957); Shrimp (wetpack) 6.75 lbs. (15 lbs. 1952-1964); Tuna (solid) 19.5 lbs. (21 lbs. 1952-1984); (chunk) 19.5 lbs. (18 lbs. 1942-1951); Flake 18 lbs.; Clams (whole or minced) 15 lbs.; Clam Juice, Chowder, etc. 30 lbs.; Crabmeat 19.5 lbs. (39 lbs. 1941-1947); Mackerel 45 lbs.; Oysters 7 lbs. (14 lbs. 1948-1969).

U.S. TOTAL CANNED SALMON PACKS

NOTE—Data thru 1983 revised with the 1985 Almanac.

Thousands of Standard Cases, Basis 48 1-lb. Cans—Figures Rounded

1927	5,077	1936	8,965	1945	4,908	1954	4,163	1963	3,295	1972	1,935
1928	6,927	1937	7,555	1946	4,510	1955	3,289	1964	3,759	1973	1,495
1929	6,991	1938	7,280	1947	5,641	1956	3,505	1965	3,634	1974	1,829
1930	6,086	1939	5,992	1948	4,825	1957	3,207	1966	4,358	1975	1,555
1931	6,740	1940	5,605	1949	5,525	1958	3,732	1967	2,072	1976	2,611
1932	5,909	1941	7,832	1950	4,311	1959	2,466	1968	3,448	1977	2,827
1933	6,362	1942	5,835	1951	4,641	1960	2,912	1969	2,551	1978	3,095
1934	8,383	1943	5,704	1952	4,464	1961	3,697	1970	3,822	1979	3,100
1935	6,028	1944	5,139	1953	3,912	1962	3,837	1971	3,509	1980	4,166

TOTAL CANNED SALMON PACKS BY AREA

Thousands of Standard Cases and Millions of Dollars—Figures Rounded

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Alaska										
Pack	3,049	4,131	4,310	2,263	3,746	4,104	3,143	2,880	n.a.	n.a.
Value	253	371	362	165	304	316	212	258	n.a.	n.a.
Other U.S. & Possessions										
Pack	52	35	166	72	28	40	168	73	n.a.	n.a.
Value	5	5	18	9	3	5	15	7	n.a.	n.a.
Total Salmon										
Pack	3,100	4,166	4,476	2,335	3,774	4,144	3,311	2,953	2,192	1,826
Value	158	376	380	174	307	320	228	265	262	217

CANNED SALMON PACK BY VARIETY BY AREA

Thousands of Standard Cases—Figures Rounded

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
CHINOOK OR KING										
Alaska	10	8	4	1	8	2	3	1	n.a.	n.a.
Washington	3	1	13	(b)	(b)	(b)	1	n.a.	n.a.	n.a.
Oregon	1	(b)	(b)	(b)	(b)	(b)	(d)	n.a.	n.a.	n.a.
Total	14	9	17	2	8	3	3	2	4	2
CHUM or KETA										
Alaska	140	433	585	191	270	336	161	159	n.a.	n.a.
Washington (f)		(b)	(e)	1	(b)	(b)	(e)	(e)	n.a.	n.a.
Oregon							n.a.	n.a.	n.a.	n.a.
Total	140	433	585	192	271	337	161	159	167	184
PINK										
Alaska	1,812	2,257	2,545	1,746	2,042	2,614	2,516	2,273	n.a.	n.a.
Washington (f)	35	10	122	18	19	13	164	68	n.a.	n.a.
Oregon			(d)				(d)	n.a.	n.a.	n.a.
Total	1,847	2,267	2,668	1,764	2,061	2,627	2,681	2,341	1,363	1,372
RED or SOCKEYE										
Alaska	1,045	1,387	1,139	298	1,381	1,096	446	392	n.a.	n.a.
Washington (f)	10	14	22	48	6	24	3	2	n.a.	n.a.
Oregon							n.a.	n.a.	n.a.	n.a.
Total	1,055	1,401	1,161	345	1,387	1,119	449	395	640	230
SILVER or COHO										
Alaska	42	46	37	27	45	56	17	55	n.a.	n.a.
Washington (f)	2	10	8	5	2	3	1	1	n.a.	n.a.
Oregon	(d)	(d)	(b)	(b)	(b)	(b)	(d)	n.a.	n.a.	n.a.
Total	44	56	46	32	48	58	18	57	18	38
TOTAL ALL VARIETIES										
Alaska	3,049	4,131	4,310	2,263	3,746	4,104	3,143	2,880	n.a.	n.a.
Washington (f)	51	35	166	72	28	40	168	73	n.a.	n.a.
Oregon	1	(b)	1	(b)	(b)	(b)	(d)	n.a.	n.a.	n.a.
Grand Total	3,100	4,166	4,476	2,335	3,774	4,144	3,311	2,953	2,192	1,826
NUMBER OF PLANTS PACKING SALMON										
Alaska	42	50	57	71	69	79	81	75	n.a.	n.a.
Washington	13	15	18	18	9	10	8	8	n.a.	n.a.
Oregon	4	3	4	4	4	4	4	3	n.a.	n.a.
California	1								n.a.	n.a.
Amer. Sam. & P.R.							2	1	n.a.	n.a.
Total	60	68	79	93	82	93	95	87	n.a.	n.a.

(b) Less than 500 cases. (d) Included in Washington. (e) Included with Chinook. (f) Includes all production outside of Alaska beginning 1985. n.a. - Not available.

U. S. PACKS OF CANNED TUNA*

Thousands of Standard Cases — Basis 48 No. ½
Solid Pack 7 oz., Chunks 6½ oz., Flakes or Grated 6 oz.

1927	1,256	1936	2,681	1945	4,532	1954	10,889	1963	16,627	1972	31,547
1928	1,216	1937	3,145	1946	4,784	1955	9,938	1964	17,714	1973	32,640
1929	1,504	1938	2,754	1947	5,894	1956	11,834	1965	18,143	1974	33,758
1930	2,011	1939	3,643	1948	7,038	1957	11,903	1966	20,183	1975	27,462
1931	1,217	1940	4,188	1949	7,290	1958	14,205	1967	19,993	1976	30,468
1932	1,206	1941	2,932	1950	9,017	1959	14,389	1968	20,226	1977	28,134
1933	1,443	1942	2,485	1951	8,237	1960	15,320	1969	20,350	1978	35,816
1934	1,967	1943	2,696	1952	9,121	1961	15,927	1970	22,203	1979	31,402
1935	2,511	1944	3,560	1953	9,580	1962	17,050	1971	22,490	1980	30,509

Thousands of Standard Cases and Millions of Dollars

	1979	1980	1981	1982	1983	1984	†1985	†1986	†1987	†1988
ALBACORE										
Solid	4,493	4,350	5,006	5,216	4,218	5,645	5,974	7,268	6,291	5,895
Chunk	1,033	965	731	735	823	854	762	786	881	829
Flakes & Grated	278	190	89	69	86	86	36	16	2	(l)
Total Albacore	5,805	5,505	5,826	6,021	5,127	6,585	6,772	8,070	7,174	6,724
Value Albacore	244	252	294	275	197	256	270	321	312	317
Cont'l. US	1,291	1,275	1,532	954	767	798	n.a.	n.a.	n.a.	n.a.
Hawaii & Terr.	4,514	4,231	4,294	5,066	4,360	5,587	n.a.	n.a.	n.a.	n.a.
LIGHTMEAT										
Solid	1,341	784	434	1,807	417	407	407	345	1,131	442
Chunk	23,956	24,032	25,319	19,173	24,309	24,012	20,772	24,199	25,222	23,486
Flakes & Grated	300	187	175	87	88	42	(a)	49	12	26
Total Lightmeat	25,598	25,003	25,928	21,067	24,814	24,461	21,179	24,593	26,365	23,954
Value Lightmeat	860	891	886	643	662	616	551	561	704	643
Cont'l. US	12,615	13,013	11,702	9,427	7,128	5,634	n.a.	n.a.	n.a.	n.a.
Hawaii & Terr.	12,982	11,990	14,226	11,639	15,686	18,828	n.a.	n.a.	n.a.	n.a.
ALL TUNA										
Solid	5,835	5,134	5,440	7,023	4,635	6,052	6,381	7,613	7,422	6,337
Chunk	24,990	24,998	26,050	19,908	25,132	24,866	21,534	24,985	26,103	24,315
Flakes & Grated	578	377	264	157	174	127	36	65	14	26
Total Tuna	31,402	30,509	31,754	27,087	29,941	31,046	27,951	32,663	33,539	30,678
Value Tuna	1,104	1,144	1,180	918	859	872	821	882	1,016	960
Cont'l. US	13,906	14,288	13,234	10,382	9,895	6,631	n.a.	n.a.	n.a.	n.a.
Hawaii & Terr.	17,496	16,221	18,520	16,706	20,046	24,415	n.a.	n.a.	n.a.	n.a.

(a) Included with Albacore. (l) Included with Lightmeat. †Packs of Flakes & Grated fish included with Hawaii & Terr. *Tuna like fishes excluded beginning 1979. † Not strictly comparable with earlier years. Basis of data for solid pack changed from 21 to 19.5 lb. standard cases.

TUNA PACKS BY CAN SIZE

Thousands of Actual Cases

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
12/4 lb.	1,065	881	n.a.	n.a.	n.a.	635	607	497	n.a.	D
48/1 lb.	1,154	4,638	n.a.	n.a.	n.a.	1,836	2,238	1,852	n.a.	D
48/½ lb.	24,484	21,753	n.a.	n.a.	n.a.	22,541	22,930	21,817	n.a.	D
48/¼ lb.	2,359	2,421	n.a.	n.a.	n.a.	2,099	1,932	1,770	n.a.	D
24/9/4 oz.	441	1,333	n.a.	n.a.	n.a.	1,947	2,112	583	n.a.	D
Other										
(conv. to Std.)	2,192	1,315	n.a.	n.a.	n.a.	157	160	150	n.a.	D
Total	31,696	32,341	n.a.	n.a.	n.a.	29,215	29,979	26,669	n.a.	D
NUMBER OF PLANTS PACKING TUNA										
California	7	7	5	5	6	4	.....	1	1	D
Oregon	3	3	1	3	3	3	3	2	1	D
Washington	3	3	5	4	3	3	.....	4	2	D
Puerto Rico	5	5	5	5	5	5	5	5	5	D
Other ¹	3	3	3	3	3	3	4	3	2	D
Total Plants	21	21	19	20	20	18	12	15	11	D

¹Hawaii & American Samoa. In 1985 no plants packing in Hawaii but 1 plant packing in Rhode Island and 2 in American Samoa. In 1986 both plants in American Samoa. n.a. - Not available. D - Data discontinued.

PACKS OF CANNED MEAT PRODUCTS†

Source: USDA, FSIS—Courtesy & Cooperation, American Meat Institute
Thousands of Pounds Processed Under Federal Inspection—Calendar year

	1978	1979	1980	*1981	1982	1983	1984	1985	1986	D1987
Luncheon Meat...	278,572	278,501	271,320	259,798	221,599	205,722	182,885	157,329	163,365	149,364
Canned Hams....	271,991	287,809	308,282	246,844	194,003	190,348	155,186	120,725	95,078	106,287
Hash Products...	84,984	80,640	83,525	72,832	74,353	87,807	96,690	69,072	107,753	99,566
Chili Con Carne...	335,717	333,621	343,395	312,262	312,223	329,296	309,561	302,902	317,240	353,736
Vienna Sausage...	116,035	98,050	89,643	96,736	84,952	90,792	86,763	80,513	89,492	111,506
Franks & Wieners in Brine.....	2,664	2,055	1,241	1,420	1,752	955	828	1,740	1,653	1,952
Deviled Ham.....	15,350	12,746	11,692	12,291	10,802	9,746	8,142	8,718	8,097	9,310
Potted Products & Spreads.....	45,680	39,798	37,381	38,291	33,576	32,864	34,790	27,612	30,085	32,139
Tamales.....	29,863	35,008	31,324	21,992	21,970	19,889	19,226	23,279	19,580	19,011
Sl. Dr. Beef.....	4,810	3,715	3,025	2,878	3,257	3,536	2,772	1,374	1,749	2,101
Chopped Beef- Hamburger (a)	8,277	1,677	7,229	12,126	11,836	11,566	12,535	11,707	11,705	10,836
Corned Beef... (a)	1,874	1,677	887	828	795	810	379	823	17,074	1,786
Meat Stew.....	156,097	145,114	138,830	125,915	131,975	152,296	145,917	146,771	140,088	169,297
Pasta Meat Products.....	426,362	436,107	392,590	379,786	382,232	384,301	435,173	450,072	332,811	482,040
Misc. Sausage Products.....	28,181	26,728	23,986	27,045	21,922	21,115	20,936	16,537	11,304	16,170
Soups.....	789,291	741,884	678,918	569,071	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Vinegar Pickled Products.....	19,361	17,854	18,684	16,321	13,971	14,256	14,634	10,960	4,978	8,817
By Products, Not Pickled....	4,613	7,256	4,592	3,097	2,850	3,192	2,913	2,278	2,025	2,439
Pork Pic./Loins...	15,673	12,645	23,374	15,132	8,016	22,315	16,996	7,387	1,863	4,011
Other-20% or More Meat...	175,631	169,105	179,685	133,303	126,051	162,812	171,372	123,072	122,161	101,985
Other-Less than 20% (ex. soup)...	314,618	279,364	316,035	434,552	370,872	316,784	276,334	253,259	233,564	260,395
Total (million lbs.).	3,126	3,011	2,966	2,856	**2,029	**2,061	**1,994	**1,816	**1,711	**1,942

† Includes all government purchases. *53 weeks. **Excludes Soups. D - Data discontinued in 1988.

PACKS OF SELECTED CONVENIENCE FOOD MEAT PRODUCTS

Source: USDA, FSIS—Courtesy & Cooperation, American Meat Institute
Thousands of Pounds Processed Under Federal Inspection—Calendar year

	1983	1984	1985	1986	D1987
Pizza.....	487,598	578,965	616,555	666,531	772,843
Pies.....	223,021	214,971	331,214	319,232	209,612
Dinners.....	237,725	284,798	206,524	268,690	214,383
Entrees.....	453,296	458,751	624,164	578,468	425,535

D - Data discontinued in 1988.

SELECTED U.S. CANNED AND FROZEN SPECIALTY PACKS

Source: Table 6a 1967, 1972, 1977 and 1982 Census Reports. Quantities are in millions of actual cases, gallons, and pounds as indicated and represent all industry production. Value is given in millions of dollars. See other Census Tables, back of this Section.

	1967		1972		1977		1982	
	Pack	Value	Pack	Value	Pack	Value	Pack	Value
DRY BEANS, Total (cases)	69.9	246.1	67.3	305.8	75.0	556.5	.....	735.3
Beans w/pork, incl. baked:								
48/8 oz. short & tall, etc.	3.9	12.1	3.1	15.6	2.1	18.5	1.7	21.1
48/1 pic., etc.	1.2	6.1						
24/300, 303, etc.	16.9	48.3	13.0	48.1	18.9	115.6	25.6	195.2
24/2, Jumbo, etc.	5.7	23.1	4.9	24.0	4.6	36.7	3.2	34.6
24/2½ (incl. qt., glass, etc.)	80.0	36.2	6.6	40.3	5.9	63.6	3.7	54.4
Other sizes, a/c.	4.3	16.7	6.9	37.6	10.7	92.4	6.6	77.1
Beans with sauce, vegetarian style, incl. baked:								
24/300, 303, etc.	7.5	20.4	4.8	20.4	4.6	31.3	3.8	31.4
Other sizes, a/c.	1.1	4.5	1.5	7.4	2.1	18.3	3.4	39.2
Beans, other dry, incl. chili con carne:								
24/300, 303, etc.	13.4	41.3	13.9	53.7	14.5	90.1	19.3	160.8
Other sizes, a/c.	6.7	30.0	9.9	49.7	9.0	69.2	10.8	115.5
Dry beans (nsk) a/c.	2.1	7.4	2.7	9.0	2.4	20.7	.....	6.0
HOMINY (cases)	2.5	5.3	2.4	6.8	2.3	9.9	1.6	10.3
MUSHROOMS (cases 48)	n.a.	46.3	n.a.	91.4	8.1	139.0	12.0	128.3
PICKLES & PICKLED PRODUCTS (gallons) Total	207.4	260.6	239.3	362.5	n.a.	553.2	n.a.	694.5
Finished cucumber pickles:								
Dill	49.1	63.9	67.3	113.4	94.1	228.3	85.8	285.2
Sour	8.1	9.1	10.5	17.5	9.5	35.7	6.5	26.8
Sweet	27.3	48.2	35.4	77.4	25.9	88.2	27.4	108.7
Fresh pack, refrigerated, etc.	52.4	63.8	22.3	44.1	16.6	41.9	20.3	69.7
Pickled products including mixes, relishes, etc.	37.8	53.7	35.0	66.0	43.4	94.1	34.7	131.1
Unfinished pickles (salt stock) ...	21.7	8.5	54.0	19.2	n.a.	25.4	21.0	22.8
Pickled fruits and vegetables nsk	32.7	21.9	14.8	24.9	.....	39.6	.....	50.2
VINEGAR & CIDER (gallons)								
Vinegar	134.6	46.8	143.2	65.5	(a)	98.8	187.1	141.2
Cider	19.9	9.9	31.0	15.1	14.8	24.0	18.2	46.7
MEAT SAUCES (except tomato) (gallons)	59.1	98.5	91.9	151.3	(a)	261.6	n.a.	540.0
Prepared mustard	36.6	39.4	47.6	48.1	52.8	91.6	50.6	138.7
Worcestershire, soy sauce, meat, vegetable, seafood, etc.	21.7	57.9	42.6	96.6	57.2	169.2	99.9	401.0
Other except tomato	.8	1.2	4.1	6.6	(a)	.8	.....	.3
JAMS, JELLIES AND PRESERVES (pounds) Total ....	.....	245.2	.....	280.3	(a)	396.9	(a)	603.0
Jams & preserves, pure:								
Strawberry	118.5	35.1	118.0	40.3	114.0	61.1	337.5	136.5
Other	289.7	81.7	302.9	87.7	221.6	107.9	209.5	167.4
Jellies, pure:								
Grape	166.8	38.8	185.9	42.7	198.9	76.5	216.5	138.3
Other	146.6	40.0	162.3	42.6	187.2	83.0	111.2	74.1
Jams & Jellies, imitation.	40.0	6.0	48.3	10.1	S	5.6	D	D
Marmalades	14.8	3.8	18.2	4.4	S	9.3	D	D
Fruit Butter	39.3	6.9	24.4	5.2	22.8	8.4	25.2	12.1
Maraschino cherries (gals.)	4.9	21.7	5.4	28.9	3.9	29.2	24.1	31.4
Jams, Jellies and preserves, nsk	.....	11.2	.....	18.4	(a)	16.1	(a)	10.8
PEANUT BUTTER (pounds)								
Consumer Sizes	387.3	150.1	510.7	234.3	541.8	403.1	641.2	723.7
Commercial-bulk	52.2	17.5	50.3	16.1	53.5	26.6	93.5	73.0
SIRUPS & MOLASSES (Pounds)	959.7	138.8	845.5	167.3	n.a.	296.8	n.a.	360.9
FRUITS, CANNED (cases)								
Olives, ripe & green ripe.	n.a.	35.7	.....	55.1	9.8	96.2	10.6	189.6
Pie mixes, canned fruit	7.7	40.8	9.2	44.9	8.0	82.6	15.9	128.0
Apple	1.3	5.8	1.5	6.7	1.5	12.8	3.4	34.9
Cherry	2.6	16.0	4.0	18.3	2.5	30.5	8.2	31.0
Peach	.7	3.9	.3	1.9	1.5	11.4	.7	10.3
Other fruit pie mixes	3.0	15.1	3.4	18.0	2.5	27.9	3.6	51.8

(a) Not collected. ¹10 to 19% estimated.
available. D - Withheld to avoid disclosure.

²20 to 29% estimated. ³Over 30% estimated. n.a. - Not
S - Withheld data does not meet publication standards.

U.S. CANNED AND FROZEN SPECIALTY PACKS—Continued

1987 Census Data Released May 1 1989 — See Packs at Page 598

	1967		1972		1977		1982	
	Pack	Value	Pack	Value	Pack	Value	Pack	Value
FRUIT JUICES (cases)								
Grape Juice:								
12/22.1 to 27 oz.	6.4	25.6	2.6	12.5	D	D	D	D
Other sizes a/c	n.a.	n.a.	11.8	39.9	D	D	D	D
Grapefruit-Pineapple blend	6.6	17.4	.4	1.3	.2	1.0	n.a.	n.a.
Prune juice	8.7	40.3	6.6	32.5	5.5	32.0	2.5	23.4
Quart glass	4.7	20.0	2.4	11.4	2.1	12.0	.8	8.0
Other sizes a/c	4.0	20.3	4.2	21.1	3.3	20.0	1.7	15.4
Nectars	3.3	10.4	4.8	16.7	6.1	33.6	1.6	13.1
MEATS, CANNED² (pounds)	1,700.8	856.4	1,768.9	1,106.3	1,188.5	1,256.3	1,147.4	1,548.6
Made in slaughtering plants	869.5	490.4	992.0	622.1	468.3	561.7	393.5	658.2
Made in meat processing plants & elsewhere	831.3	366.0	776.9	484.2	720.2	694.6	753.9	890.4
POULTRY, CANNED								
(except soups)(cases)	3.6	37.7	4.7	72.7	n.a.	n.a.	n.a.	51.3
48/10 oz. & under	.9	17.0	1.0	15.8	n.a.	n.a.	1.0	21.0
12/40 to 60 oz.	.6	5.3	.6	6.7	.5	11.5	.4	13.1
Other sizes	2.1	15.4	3.1	50.2	n.a.	50.4	n.a.	17.2
BABY FOODS (pounds)	.....	246.3	n.a.	346.7	n.a.	401.3	n.a.	596.4
Fruits	157.1	47.9	215.3	72.4	214.8	96.2	D	D
Meats	n.a.	n.a.	61.1	45.6	D	D	D	D
Vegetables	149.1	35.3	126.2	41.5	113.7	50.7	150.1	66.5
Desserts	169.6	50.4	199.4	64.6	D	D	151.4	65.6
Juices (cases)	9.4	19.7	9.8	28.4	13.1	65.2	20.1	115.8
Other canned	284.0	93.0	248.4	94.1	D	D	225.6	102.8
CANNED & CURED								
SEAFOOD (pounds)	n.a.	421.1	n.a.	587.8	n.a.	1,025.5	n.a.	1,267.1
Canned (except soups)	n.a.	307.6	n.a.	453.9	576.1	773.3	n.a.	907.7
Canned Seafood soups	n.a.	22.4	n.a.	41.9	133.5	65.8	151.1	90.4
Other Canned	n.a.	56.7	n.a.	64.4	n.a.	115.0	n.a.	n.a.
Cured Seafood	42.8	34.4	21.8	27.5	n.a.	71.5	n.a.	133.9
OTHER CANNED SPEC (cases)	n.a.	698.3	n.a.	977.4	n.a.	1,404.2	n.a.	2,035.0
Spaghetti without meat	n.a.	(b)	n.a.	(b)	n.a.	D	6.8	67.4
Mincemeat (pounds)	n.a.	(b)	n.a.	(b)	n.a.	D	7.4	8.5
Soups (except seafood), & canned specialties, nsk	n.a.	(b)	n.a.	(b)	n.a.	(b)	n.a.	(b)
FROZEN SPECIALTIES (pounds)	2,524.7	1,021.3	3,673.8	1,742.6	n.a.	2,911.9	n.a.	4,417.2
Pies & other Baked goods	626.0	208.9	994.2	387.5	n.a.	770.3	n.a.	1,292.5
Fruit & Custard Pies	402.0	101.5	621.8	169.3	693.2	346.2	658.5	391.2
Other baked (waffles, cookies, cakes, pastries) excl. bread & rolls	224.0	107.4	372.4	218.1	620.7	424.1	1,961.6	901.4
FROZEN DINNERS, BEEF, PORK, POULTRY PIES, NATIONALITY FOODS	1,046.5	433.1	1,440.5	702.0	n.a.	1,297.7	n.a.	2,356.6
Dinners	397.9	217.3	787.4	385.5	788.0	503.5	n.a.	1,160.4
Beef & Pork Pies	125.4	44.4	192.5	86.9	58.5	35.9	79.4	41.7
Poultry Pies	193.8	45.0	225.2	78.0	233.1	99.4	241.1	119.4
Nationality Foods	329.4	126.4	293.1	151.1	n.a.	639.5	1,123.8	1,023.2
Dinners, Pies, Nat. Fds. nsk	n.a.	n.a.	.8	.5	n.a.	19.3	n.a.	11.8
Other, ex. Seafood, (incl. soups)	697.3	247.4	890.0	492.5	1,229.5	718.2	789.2	624.3
Frozen Spec. nsk (companies 10 or more employees) ¹	335.1	124.0	304.3	140.0	n.a.	75.1	n.a.	79.9
Frozen Spec. nsk (companies less than 10 employees) ¹	21.3	7.9	44.8	20.6	n.a.	50.6	n.a.	63.9
FROZEN PACKAGED								
FISH (pounds)	309.0	132.6	518.2	280.1	n.a.	744.4	n.a.	1,033.9
Fillet & Steaks	136.7	52.2	151.0	74.2	n.a.	164.2	n.a.	301.1
Fish Sticks	69.5	28.9	144.4	81.0	(c)	(c)	D	D
Fish Portions	102.8	51.5	222.8	124.9	422.7	390.6	D	D
Other	n.a.	n.a.	n.a.	n.a.	n.a.	189.6	n.a.	n.a.
FROZEN PACKAGED SHELLFISH & OTHER SEAFOOD INCL. SOUPS (pounds)	279.2	245.5	329.1	415.8	n.a.	887.6	n.a.	1,398.0
Shrimp	166.0	165.6	193.0	274.4	n.a.	430.0	n.a.	763.3
Other, oyster, crab, etc.	61.3	52.0	81.3	98.3	n.a.	399.5	n.a.	541.4
Other, soups, stews, chowders, dinners, pies	51.9	27.9	54.8	43.1	n.a.	58.1	61.2	93.3

n.a. - Not available. ¹20 employees in 1972, 1977, and 1982. ²Except dog and cat food. Includes products containing 20% or more meat. Products containing less meat included in specialties above. (a)Included in other. (b) Included in total above. (c)Included in portions. D - Withheld to avoid disclosure.

U.S. FROZEN FRUIT AND VEGETABLE PACKS

Compiled by The American Frozen Food Institute

Thousands of Pounds

NOTE: Data represents calendar year production by final container size (after repack). Over the span of eight to ten years shown, there have been shifts in both regional production and containerization so that some overlap is inevitable. "Other Uses" appearing under size classification represent initially frozen vegetable weight going into combination vegetables, canned veg. and prepared foods. The occasional minus values shown in parentheses represent the amount of carryover that was repacked into smaller containers and/or imported product repacked in the U.S.

TOTAL UNITED STATES VEGETABLE PACKS*

1942.....	152,512	1950.....	587,101	1958.....	1,433,244	1966.....	3,364,386	1974.....	5,473,141
1943.....	207,872	1951.....	770,038	1959.....	1,626,601	1967.....	3,507,625	1975.....	5,212,966
1944.....	237,092	1952.....	895,719	1960.....	1,958,621	1968.....	3,857,840	1976.....	5,491,035
1945.....	307,977	1953.....	1,103,270	1961.....	2,116,041	1969.....	3,915,231	1977.....	6,245,809
1946.....	450,000	1954.....	974,628	1962.....	2,264,116	1970.....	4,316,731	1978.....	6,560,733
1947.....	346,208	1955.....	1,139,695	1963.....	2,322,376	1971.....	4,574,361	1979.....	6,875,159
1948.....	446,358	1956.....	1,533,038	1964.....	2,639,199	1972.....	4,874,561	1980.....	6,269,229
1949.....	563,499	1957.....	1,366,565	1965.....	2,933,108	1973.....	5,158,398	1981.....	6,972,328

*Includes potatoes beginning 1953. Vegetable mixes excluded 1965 and thereafter.

PACKS OF FROZEN VEGETABLES BY COMMODITY

Item	1981	1982	1983	1984	1985	1986	1987	1988
Artichokes.....	1,693	1,419	1,075	1,643	1,202	1,417	1,451	1,052
Asparagus.....	11,289	16,958	13,599	15,099	19,990	18,008	16,725	18,055
Beans, Green.....	248,193	285,029	255,832	260,043	281,469	256,716	252,750	235,986
Beans, Gr. Italian..	15,443	20,355	19,954	22,665	24,511	25,430	24,819	20,519
Beans, Wax.....	9,227	8,283	7,387	8,487	10,034	5,386	4,379	5,465
Beans, Lima.....	88,840	123,722	113,217	122,479	117,057	100,855	102,350	97,358
Beans, Speck Butter.	8,630	8,986	6,546	7,901	6,671	7,040	5,713	6,373
Broccoli.....	306,755	335,516	285,358	365,764	356,806	324,519	312,460	289,446
Brussels Sprouts...	62,162	52,980	41,354	50,449	44,735	37,990	45,660	49,787
Carrots.....	269,845	296,679	212,500	255,585	254,586	270,363	294,596	294,673
Cauliflower.....	105,161	111,644	100,541	102,106	94,617	89,120	77,758	78,762
Celery.....	11,762	12,764	13,497	17,062	15,839	18,729	21,640	24,817
Collards.....	16,051	18,031	9,440	12,968	15,708	19,454	17,930	15,204
Corn, cut.....	313,982	455,714	367,272	323,977	360,297	364,891	433,158	423,339
Corn, on cob.....	305,390	378,629	293,947	349,666	423,326	391,954	406,859	345,869
Kale.....	4,788	4,727	2,894	3,335	5,167	4,175	4,792	2,862
Mixed Vegetables*	164,606	141,165	157,279	162,558	178,351	184,730	185,172	205,024
Mushrooms.....	22,074	23,443	24,539	24,457	28,669	32,410	37,372	27,350
Mustard Greens...	13,011	8,516	7,998	8,508	11,222	11,768	11,556	9,266
Okra.....	43,774	54,339	46,038	54,579	51,815	73,160	70,472	65,708
Onion rings.....	119,786	135,522	107,429	117,376	91,895	127,592	139,622	105,529
Onions, other.....	40,088	46,822	35,208	39,106	50,113	57,866	48,399	51,683
Peas, blackeye.....	33,404	23,821	22,926	28,207	31,675	22,586	29,003	30,158
Peas, Green.....	333,888	404,830	354,480	423,740	485,985	373,605	400,231	358,779
Peas & Carrots*	33,249	29,539	31,238	31,998	34,887	36,436	37,063	37,653
Peas & Onions*	10,260	7,434	8,571	9,477	11,174	9,692	8,002	9,523
Peppers, Gr. & Red..	16,147	12,940	24,523	25,586	20,922	22,958	23,043	29,673
Pumpkin & Sq.....	37,806	24,897	17,759	15,824	20,734	22,319	30,393	23,870
Rhubarb.....	6,483	6,767	3,402	5,271	6,647	6,106	6,211	8,082
Spinach.....	183,646	150,667	143,205	171,249	174,802	157,119	171,208	172,849
Squash, Summer...	46,833	65,179	62,738	66,467	67,458	75,994	70,999	69,961
Stew Vegetables*	14,366	13,908	14,361	19,877	20,201	19,536	18,346	18,582
Succotash.....	6,600	6,578	6,037	5,479	6,841	7,083	7,011	7,210
Swt. Pot. & Yams...	19,993	20,822	9,719	13,749	18,677	13,683	11,871	20,044
Turnip Greens.....	13,020	9,799	11,925	10,299	14,446	14,371	17,205	17,003
Turnips, Tur.Gr/Tur.	19,243	19,759	23,290	19,215	20,639	19,417	16,513	21,919
Misc. Veg.....	7,682	14,411	7,208	5,252	3,144	6,399	8,291	12,608
Total Vegetables*	2,736,089	3,153,970	2,643,800	2,948,114	3,130,858	2,973,400	3,115,429	2,934,049
Tot. Potato Prod. ...	4,236,239	4,377,228	4,509,905	4,732,894	5,118,102	5,149,148	5,287,634	5,763,671
Tot. Veg. & Pot. ...	6,972,328	7,531,198	7,153,705	7,681,008	8,248,960	8,122,548	8,403,063	8,697,720

*Repack—Quantities of component products are included in the individual product figures of this table which represent first freezing. The figures themselves are Repacks not included in "Total Vegetables".

TOTAL FROZEN VEGETABLE PACKS BY REGION

Thousands of Pounds

	1981	1982	1983	1984	1985	1986	1987	1988
East	626,792	660,457	613,330	492,107	755,814	714,280	663,248	524,165
South	296,887	314,202	252,382	282,053	326,029	356,759	378,037	407,838
Midwest	893,206	1,036,259	1,067,808	1,134,522	1,280,342	1,345,198	1,297,447	1,317,096
West	5,155,443	5,520,280	5,220,185	5,772,326	5,886,775	5,706,311	6,064,331	6,448,621
Total US	6,972,328	7,531,198	7,153,705	7,681,008	8,248,960	8,122,548	8,403,063	8,697,720

EAST: Conn., Del., Me., Md., Mass., N.J., N.Y. and Pa. SOUTH: Ala., Ark., Fla., Ga., Ky., La., Miss., Mo., N.C., Okla., Tenn., Tex. and Va. Includes South Carolina beginning 1986. MIDWEST: Ill., Ind., Mich., Minn., Neb., No. Dak., So. Dak., Ohio and Wis. WEST: Calif., Colo., Idaho, Mont., New Mex., Ore., Utah, Wash. and Wyoming. Includes Arizona beginning 1984.

FROZEN ASPARAGUS PACKS IN THE U.S.

Thousands of Pounds—Compiled by The American Frozen Food Institute

1942 ... 5,769	1949 ... 18,422	1956 ... 37,674	1963 ... 30,315	1970 ... 25,925	1977 ... 22,474
1943 ... 9,619	1950 ... 22,309	1957 ... 31,201	1964 ... 31,054	1971 ... 29,959	1978 ... 15,427
1944 ... 12,339	1951 ... 23,562	1958 ... 24,365	1965 ... 30,867	1972 ... 33,574	1979 ... 23,989
1945 ... 20,638	1952 ... 25,460	1959 ... 32,739	1966 ... 34,532	1973 ... 20,157	1980 ... 11,232
1946 ... 28,316	1953 ... 32,945	1960 ... 40,026	1967 ... 32,460	1974 ... 16,190	1981 ... 11,289
1947 ... 10,737	1954 ... 25,780	1961 ... 34,157	1968 ... 34,355	1975 ... 18,409	1982 ... 16,958
1948 ... 18,321	1955 ... 28,669	1962 ... 30,810	1969 ... 23,033	1976 ... 23,750	1983 ... 13,599

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
BY REGION										
Ea., So., MW	n.a.	n.a.	n.a.	†	†	n.a.	†	†	5,048	5,110
California	n.a.	n.a.	n.a.	8,107	4,652	n.a.	8,840	11,149	*11,677	*12,945
Washington†	n.a.	n.a.	n.a.	8,851	8,947	n.a.	11,150	6,859		

BY STYLE										
Spears	15,428	6,632	6,489	9,681	7,563	7,776	9,778	8,126	7,770	10,475
Cuts & Tips	8,561	4,600	4,800	7,277	6,036	7,323	10,212	9,882	8,955	7,580

SIZE CLASSIFICATION										
Retail	9,226	4,279	5,280	4,090	4,666	4,263	5,201	5,253	6,188	6,950
Food Service	13,431	5,933	6,006	11,502	8,134	8,168	9,102	6,781	5,327	6,116
Bulk	1,332	1,020	3	1,366	799	2,668	5,687	5,974	5,210	4,989
Total Pack	23,989	11,232	11,289	16,958	13,599	15,099	19,990	18,008	16,725	18,055

† Ea., So. & MW included in Washington thru 1986. * Beginning 1987 Washington included with California.
n.a. = Not available.

FROZEN GREEN BEAN PACKS IN THE U.S.

Thousands of Pounds—Compiled by The American Frozen Food Institute

1942 ... 13,784	1949 ... 58,524	1956 ... 137,744	1963 ... 156,320	1970 ... 199,203	1977 ... 230,248
1943 ... 24,491	1950 ... 65,529	1957 ... 134,361	1964 ... 173,794	1971 ... 211,601	1978 ... 263,245
1944 ... 23,753	1951 ... 81,550	1958 ... 156,006	1965 ... 177,218	1972 ... 243,576	1979 ... 262,708
1945 ... 31,460	1952 ... 87,438	1959 ... 138,527	1966 ... 217,914	1973 ... 267,852	1980 ... 235,182
1946 ... 40,975	1953 ... 114,781	1960 ... 148,751	1967 ... 224,848	1974 ... 239,872	1981 ... 248,193
1947 ... 30,911	1954 ... 123,253	1961 ... 170,256	1968 ... 207,910	1975 ... 208,185	1982 ... 285,029
1948 ... 49,583	1955 ... 120,968	1962 ... 154,288	1969 ... 184,766	1976 ... 179,353	1983 ... 255,832

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
PACK BY REGION*										
East & South	100,462	84,190	94,442	113,386	97,184	131,635	147,493	120,107	141,028	124,582
Midwest	25,173	24,229	30,011	30,783	32,367	(b)	(b)	(b)	(b)	(b)
Northwest	137,073	126,763	123,740	140,860	126,281	128,408	133,976	136,609	111,722	111,404
California	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)

BY STYLE										
Regular cut	162,000	155,996	160,020	190,658	162,699	158,413	179,349	170,694	159,027	145,187
French cut	91,686	71,713	78,639	82,485	78,825	81,355	82,544	63,892	67,297	65,138
Whole†	9,022	7,473	9,534	11,886	14,308	20,275	19,576	22,130	26,426	25,661

SIZE CLASSIFICATION										
Retail	99,010	90,334	96,109	95,820	99,602	105,257	111,991	104,157	105,010	99,710
Food Service	51,265	45,493	48,188	54,600	56,387	51,994	50,242	53,496	53,328	50,835
Bulk	71,856	61,474	67,279	98,104	69,215	72,254	68,135	61,072	57,791	51,308

Subtotal	222,131	197,301	211,576	248,524	225,204	229,505	230,368	218,725	216,129	201,853
Other Uses**	40,577	37,861	36,617	36,505	30,628	30,538	51,101	37,991	36,621	34,133
TOTAL PACK ...	262,708	235,182	248,193	285,029	255,832	260,043	281,469	256,716	252,750	235,986

GREEN BEANS, ITALIAN										
Retail	6,225	3,557	3,886	5,423	4,158	5,479	6,776	7,363	7,132	6,966
Food Service	2,232	2,787	2,634	3,852	3,693	3,105	2,711	2,685	2,728	3,304
Bulk	5,799	3,766	5,011	5,125	9,097	11,052	10,115	11,140	11,860	7,333
Other Uses**	4,957	6,745	3,912	5,955	3,006	3,029	4,909	4,242	3,099	2,916

TOTAL PACK ...	19,213	16,855	15,443	20,355	19,954	22,665	24,511	25,430	24,819	20,519
-----------------------	---------------	---------------	---------------	---------------	---------------	---------------	---------------	---------------	---------------	---------------

* Some overlap from region to region. ** Frozen product used for combination packs and/or canned and prepared foods. (a) Included in Northwest. (b) Included in East & South. † Some quantities may be repacked into other styles.

FROZEN GREEN BEANS*—SUPPLY—STOCKS MOVEMENT

Source: Economic Research Service, USDA; Packs, American Frozen Food Institute;
Stocks, National Agricultural Statistics Service, USDA

MILLIONS OF POUNDS

July 1 to July 1	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
Carry-in 7/1	73.4	91.2	80.9	68.8	86.4	81.5	75.2	71.2	74.2	59.8
Pack	253.7	227.7	238.7	273.1	241.5	239.8	261.9	234.6	226.3	210.3
Packer Supply	327.1	318.9	319.6	341.9	327.9	321.3	337.1	305.8	300.5	270.2
Shipments 7/1-1/1	145.8	124.6	142.2	137.8	115.9	131.5	165.2	123.2	117.6	123.8
Stocks 1/1	181.3	194.3	177.4	204.1	212.0	189.8	171.9	182.6	182.9	146.4
Shipments 1/1-7/1	90.1	113.4	108.6	117.7	130.5	114.6	100.7	108.4	123.1	7
c/o Stocks 7/1	91.2	80.9	68.8	86.4	81.5	75.2	71.2	74.2	59.8	P
Shipments 7/1-7/1	235.9	238.0	250.8	255.5	246.4	246.1	265.9	231.6	240.7	P

*Stock figures include regular cut and French cut green only. Excludes whole style. Pack figures adjusted accordingly to reflect accurate movement. P= Not available at press time.

FROZEN WAX BEAN PACKS IN THE U. S.

Compiled by The American Frozen Food Institute

Thousands of Pounds

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Retail	2,104	1,126	1,451	1,548	1,436	2,046	1,912	1,685	2,121	1,815
Food Service	1,896	2,495	2,328	2,915	2,711	1,833	1,766	2,123	2,033	2,892
Bulk	5,112	3,372	4,684	2,759	2,369	4,012	5,855	920	225	758
Other Uses	1,517	1,751	764	1,061	871	596	501	658	(a)	(a)
TOTAL PACK	10,629	8,744	9,227	8,283	7,387	8,487	10,034	5,386	4,379	5,465

(a) Included in Bulk.

FROZEN LIMA BEAN PACKS IN THE U. S.

Compiled by The American Frozen Food Institute

Thousands of Pounds

BABY LIMAS

1945 ... 19,234	1951 ... 44,147	1957 ... 60,736	1963 ... 61,707	1969 ... 82,562	1975 ... 85,670
1946 ... 28,805	1952 ... 52,405	1958 ... 65,461	1964 ... 60,823	1970 ... 73,012	1976 ... 43,854
1947 ... 29,858	1953 ... 64,390	1959 ... 64,351	1965 ... 81,425	1971 ... 73,893	1977 ... 92,154
1948 ... 31,663	1954 ... 60,726	1960 ... 79,535	1966 ... 89,693	1972 ... 92,634	1978 ... 81,145
1949 ... 44,665	1955 ... 58,232	1961 ... 89,883	1967 ... 85,687	1973 ... 98,112	1979 ... 82,775
1950 ... 33,960	1956 ... 67,978	1962 ... 81,592	1968 ... 84,579	1974 ... 97,163	1980 ... 52,788

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
BY REGION										
East. So. & Midwest	11,469	8,976	15,575	18,144	17,803	24,039	21,359	19,644	17,166	11,920
Calif. & Northwest	71,306	43,812	51,909	73,637	67,359	58,946	63,208	52,000	58,233	64,527
SIZE CLASSIFICATION										
Retail	35,288	29,317	35,849	30,661	31,544	23,146	26,084	26,508	26,056	26,702
Food Service	11,582	11,295	8,837	12,680	11,498	7,899	9,532	10,722	12,455	10,032
Bulk	28,521	788	14,409	41,230	33,560	41,609	35,314	21,094	25,506	31,500
Subtotal	75,391	41,400	59,095	84,571	76,602	72,654	70,930	58,324	64,017	68,234
Other Uses	7,384	11,388	8,389	7,210	8,560	10,331	13,637	13,320	11,382	8,213
Total Baby	82,775	52,788	67,484	91,781	85,162	82,985	84,567	71,644	75,399	76,447

FORDHOOK LIMAS

1945 ... 9,242	1951 ... 63,873	1957 ... 70,644	1963 ... 56,000	1969 ... 55,792	1975 ... 50,245
1946 ... 21,278	1952 ... 61,521	1958 ... 60,449	1964 ... 55,665	1970 ... 36,844	1976 ... 24,973
1947 ... 38,336	1953 ... 74,205	1959 ... 49,672	1965 ... 64,102	1971 ... 40,690	1977 ... 45,204
1948 ... 43,741	1954 ... 68,948	1960 ... 68,022	1966 ... 62,224	1972 ... 52,968	1978 ... 38,110
1949 ... 43,284	1955 ... 59,465	1961 ... 70,053	1967 ... 63,950	1973 ... 51,577	1979 ... 41,498
1950 ... 52,029	1956 ... 75,560	1962 ... 68,992	1968 ... 66,513	1974 ... 46,226	1980 ... 33,120

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
SIZE CLASSIFICATION										
Retail	25,179	22,879	23,170	20,115	24,940	16,699	18,374	15,210	18,047	8,230
Food Service	7,512	4,842	4,831	5,501	4,545	4,587	2,731	3,706	4,512	1,767
Bulk	8,807	5,399	(6,645)	6,325	(1,430) ¹	18,208	11,385	10,296	4,392	10,914
Total Fordhook	41,498	33,120	21,356	31,941	28,055	39,494	32,490	29,211	26,951	20,911

¹Deficit attributable to previous year carryover.

FROZEN BROCCOLI PACKS IN THE U.S.

Compiled by The American Frozen Food Institute

Thousands of Pounds

1942	3,223	1949	45,233	1956	118,287	1963	135,334	1970	185,157	1977	314,395
1943	4,882	1950	41,028	1957	80,452	1964	129,817	1971	189,600	1978	276,519
1944	6,840	1951	48,768	1958	109,679	1965	122,310	1972	234,344	1979	298,618
1945	11,656	1952	82,253	1959	103,215	1966	158,586	1973	213,165	1980	290,657
1946	25,789	1953	89,043	1960	128,210	1967	166,730	1974	245,285	1981	306,755
1947	9,117	1954	62,004	1961	121,636	1968	172,959	1975	191,638	1982	335,516
1948	29,126	1955	96,240	1962	111,450	1969	153,784	1976	201,513	1983	285,358

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
BY REGION										
Other States	n.a.	n.a.	18,055	31,666	24,999	35,389	19,074	26,357	26,435	33,768
California †	n.a.	n.a.	288,700	303,850	260,359	330,375	337,732	298,162	286,025	255,678
BY STYLE										
Cuts	106,874	102,853	110,541	125,334	102,371	140,579	147,085	138,666	135,040	122,989
Chopped	34,666	36,021	41,047	39,654	33,467	45,709	54,830	43,290	40,733	33,462
Spears ¹	157,078	151,783	155,167	170,528	149,520	179,476	154,891	142,563	136,687	132,995
SIZE CLASSIFICATION										
Retail	167,095	167,183	154,835	154,174	133,501	151,926	153,614	144,160	147,344	149,598
Food Service	80,362	72,346	95,733	96,042	104,182	115,331	114,414	108,210	113,764	94,068
Bulk	27,568	16,286	27,132	37,426	21,710	72,213	29,238	22,149	(616) ²	(4,279) ²
Subtotal	275,025	255,815	277,700	287,642	259,393	339,470	297,266	274,519	260,492	239,387
Other Uses	23,593	34,842	29,055	47,874	25,965	26,294	59,540	50,000	51,968	50,059
TOTAL PACK	298,618	290,657	306,755	335,516	285,358	365,764	356,806	324,519	312,460	289,446

n.a. - Not available. † Includes Northwest 1980 and later years. ¹ Some quantities may be repacked into other styles. ² Deficit attributable to previous years' carryover and imported product repacked in the U.S.

FROZEN BROCCOLI—SUPPLY—STOCKS—MOVEMENT

Source: Economic Research Service, USDA; Packs, American Frozen Food Institute; Stocks, National Agricultural Statistics Service, USDA

MILLIONS OF POUNDS

Calendar Year	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Stocks 1/1	94.5	103.3	97.2	84.1	107.2	70.8	92.8	84.5	105.1	114.8
Pack	298.6	290.7	306.8	335.5	285.4	365.8	356.8	324.5	312.5	289.4
Imports	n.a.	23.9	27.8	31.9	33.6	65.4	77.1	117.2	194.8	135.0
Supply	n.a.	417.9	431.8	451.5	426.2	502.0	526.7	526.2	612.4	539.2
Stocks 3/1	60.2	78.7	76.3	55.5	88.5	62.1	91.1	83.8	95.1	107.3
Movement 1/1 - 1/1	n.a.	320.7	347.7	344.3	355.4	409.2	442.2	421.1	497.6	483.0

n.a. - Not available.

FROZEN BRUSSELS SPROUTS PACKS IN THE U.S.

Compiled by The American Frozen Food Institute

Thousands of Pounds

1942	3,430	1949	23,455	1956	43,989	1963	42,272	1970	42,663	1977	56,642
1943	4,839	1950	22,439	1957	33,354	1964	47,476	1971	49,195	1978	71,161
1944	4,920	1951	22,476	1958	30,424	1965	37,339	1972	55,845	1979	61,353
1945	6,606	1952	22,454	1959	38,733	1966	51,698	1973	56,836	1980	63,366
1946	13,521	1953	40,802	1960	39,261	1967	39,479	1974	53,729	1981	62,162
1947	4,557	1954	33,418	1961	40,057	1968	49,024	1975	54,422	1982	52,980
1948	10,526	1955	23,142	1962	40,334	1969	40,083	1976	44,845	1983	41,354

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
SIZE CLASSIFICATION										
Retail	41,889	44,497	43,741	33,547	27,299	26,215	24,149	21,539	28,141	28,346
Other	19,464	18,869	18,421	19,433	14,055	24,234	20,586	16,451	17,519	21,441
TOTAL PACK	61,353	63,366	62,162	52,980	41,354	50,449	44,735	37,990	45,660	49,787

FROZEN CARROT PACKS IN THE U.S.

Compiled by The American Frozen Food Institute

Thousands of Pounds

1942 ... 1,043	1949 ... 12,751	1956 ... 51,010	1963 ... 69,773	1970 ... 173,054	1977 ... 263,769
1943 ... 2,260	1950 ... 13,338	1957 ... 34,237	1964 ... 63,947	1971 ... 143,681	1978 ... 238,415
1944 ... 903	1951 ... 10,573	1958 ... 53,713	1965 ... 109,538	1972 ... 165,879	1979 ... 263,080
1945 ... 6,051	1952 ... 22,269	1959 ... 55,487	1966 ... 131,127	1973 ... 231,688	1980 ... 191,151
1946 ... 9,069	1953 ... 29,332	1960 ... 72,100	1967 ... 133,337	1974 ... 248,081	1981 ... 269,845
1947 ... 2,905	1954 ... 27,494	1961 ... 60,271	1968 ... 162,282	1975 ... 165,869	1982 ... 296,679
1948 ... 15,393	1955 ... 34,389	1962 ... 79,422	1969 ... 150,945	1976 ... 181,277	1983 ... 212,500

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
BY REGION										
East, South & M.W.	31,324	40,882	66,743	72,658	73,456	69,104	53,986	68,209	83,906	72,478
Northwest	117,917	65,601	120,575	135,986	86,224	101,441	124,470	133,185	210,690	222,195
California	113,839	84,668	82,527	88,035	52,820	85,040	76,130	68,969	(a)	(a)
BY STYLE										
Chips & Diced ...	143,335	101,306	146,972	145,091	88,331	94,509	99,940	138,445	120,845	100,847
Sliced & Crinkle ...	73,765	56,779	70,892	86,408	69,843	89,505	84,604	72,036	78,558	96,430
Nuggets, Baby & whole	24,310	19,285	26,558	30,144	26,883	41,033	43,642	31,680	46,750	58,669
Shoestring	10,625	8,254	19,026	27,644	19,803	21,208	20,460	21,759	44,149	29,963
Chunks & other ...	11,045	5,527	6,397	7,394	7,640	330	5,940	6,443	4,314	8,764
SIZE CLASSIFICATION										
Retail	33,532	34,049	41,000	37,985	39,851	32,033	38,531	36,598	37,565	31,499
Food Service ...	17,936	18,368	21,203	19,590	20,466	22,003	23,841	26,413	29,559	35,061
Bulk	150,544	81,875	158,870	183,585	95,248	128,632	114,105	153,039	158,042	163,514
Subtotal	202,012	134,292	221,073	241,160	155,565	182,668	176,777	216,050	225,166	230,074
Other Uses	61,068	56,859	48,772	55,519	56,935	72,917	77,809	54,313	69,430	64,599
TOTAL PACK ...	263,080	191,151	269,845	296,679	212,500	255,585	254,586	270,363	294,596	294,673

(a) Included in Northwest.

FROZEN CARROTS—SUPPLY—STOCKS—MOVEMENT

Source: Economic Research Service, USDA; Packs, American Frozen Food Institute;
Stocks, National Agricultural Statistics Service, USDA

MILLIONS OF POUNDS

Aug. 1 to Aug. 1	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
Carry-in 8/1	75.6	93.5	57.4	75.0	142.8	96.7	93.7	92.7	112.6	116.3
Pack	263.1	191.2	269.8	296.7	212.5	255.6	254.6	270.4	294.6	294.7
Packers Supply ...	338.7	284.7	327.2	371.7	355.3	352.3	348.3	363.1	407.2	411.0
Shipments 8/1-1/1	162.4	144.6	176.9	159.5	168.9	188.6	167.5	154.4	192.8	227.9
Stocks 1/1	176.3	140.1	150.3	212.2	186.4	163.7	180.8	208.7	214.4	183.1
Shipments 1/1-8/1	82.8	82.7	75.3	69.4	89.7	70.0	88.1	96.1	98.1	P
e/o Stocks 8/1 ...	93.5	57.4	75.0	142.8	96.7	93.7	92.7	112.6	116.3	P
Shipments 8/1-8/1	245.2	227.3	252.2	228.8	258.6	258.6	255.6	250.5	290.9	P

P - Not available at press time

FROZEN CAULIFLOWER IN THE U.S.

Compiled by The American Frozen Food Institute

Thousands of Pounds										
1942 ... 1,200	1949 ... 21,655	1956 ... 47,159	1963 ... 40,677	1970 ... 59,782	1977 ... 96,670					
1943 ... 2,513	1950 ... 12,339	1957 ... 22,690	1964 ... 43,596	1971 ... 67,659	1978 ... 127,513					
1944 ... 4,821	1951 ... 22,428	1958 ... 33,251	1965 ... 46,211	1972 ... 94,070	1979 ... 101,130					
1945 ... 7,391	1952 ... 33,166	1959 ... 33,566	1966 ... 53,985	1973 ... 96,098	1980 ... 84,766					
1946 ... 13,237	1953 ... 35,710	1960 ... 48,743	1967 ... 50,971	1974 ... 93,754	1981 ... 105,161					
1947 ... 5,354	1954 ... 17,088	1961 ... 41,117	1968 ... 67,566	1975 ... 76,056	1982 ... 111,644					
1948 ... 13,963	1955 ... 40,086	1962 ... 37,806	1969 ... 69,744	1976 ... 67,807	1983 ... 100,541					
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988

BY REGION

California	76,957	66,369	85,370	85,339	71,779	72,062	60,250	64,631	51,244	48,551
Ea., So., NW.	24,173	18,397	19,791	26,305	28,762	30,044	34,367	24,489	26,514	30,211

SIZE CLASSIFICATION

Retail	48,954	41,916	40,970	36,468	29,821	27,523	27,004	28,217	28,266	26,000
FS & Bulk	39,788	21,397	50,165	52,968	52,093	53,820	28,540	35,190	20,330	25,949
Subtotal	88,742	63,313	91,135	89,436	81,914	81,343	55,544	63,407	48,596	51,949
Other Uses	12,388	21,453	14,026	22,208	18,627	20,763	39,073	25,713	29,162	26,813
TOTAL PACK ...	101,130	84,766	105,161	111,644	100,541	102,106	94,617	89,120	77,758	78,762

FROZEN CORN-ON-COB PACKS IN THE U.S.

Compiled by The American Frozen Food Institute

Thousands of Pounds										
1942 . . . 1,767	1949 . . . 17,563	1956 . . . 20,422	1963 . . . 11,748	1970 . . . 80,889	1977 . . . 265,183					
1943 846	1950 . . . 10,069	1957 . . . 13,699	1964 . . . 27,757	1971 . . . 106,893	1978 . . . 307,079					
1944 606	1951 . . . 8,772	1958 . . . 10,370	1965 . . . 40,337	1972 . . . 133,064	1979 . . . 269,422					
1945 445	1952 . . . 14,186	1959 . . . 9,872	1966 . . . 44,241	1973 . . . 166,830	1980 . . . 258,567					
1946 . . . 2,296	1953 . . . 17,217	1960 . . . 11,320	1967 . . . 43,973	1974 . . . 152,330	1981 . . . 305,390					
1947 . . . 6,064	1954 . . . 16,788	1961 . . . 12,000	1968 . . . 76,358	1975 . . . 183,381	1982 . . . 378,629					
1948 . . . 10,324	1955 . . . 6,932	1962 . . . 16,873	1969 . . . 73,914	1976 . . . 187,582	1983 . . . 293,947					
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988

BY REGION

East & South	34,910	26,712	31,702	46,846	45,684	59,250	51,150	57,238	(b)	46,491
Midwest	66,114	78,199	107,790	96,828	60,148	93,285	120,110	130,376	176,696	103,060
West	168,398	153,656	165,898	234,955	188,115	197,131	252,066	204,340	230,163	196,318

SIZE CLASSIFICATION

Retail	179,737	131,283	152,195	168,441	160,919	178,279	198,731	401,360	355,211	335,607
Food Service	109,378	109,646	84,331	133,404	109,905	130,034	186,036	(a)	(a)	(a)
Bulk	(19,693)	17,638	68,864	76,784	23,123	41,353	38,559	†(9,406)	51,648	10,262
TOTAL PACK ...	269,422	258,567	305,390	378,629	293,947	349,666	423,326	391,954	406,859	345,869

† Deficit attributable to previous years carryover and imported product packed in the U.S. (a) Included in Retail (b) Included in Midwest

FROZEN CUT CORN PACKS IN THE U.S.

Compiled by The American Frozen Food Institute

Thousands of Pounds										
1942 . . . 9,369	1949 . . . 37,076	1956 . . . 118,153	1963 . . . 168,156	1970 . . . 216,097	1977 . . . 260,773					
1943 . . . 21,450	1950 . . . 32,998	1957 . . . 112,917	1964 . . . 159,846	1971 . . . 226,835	1978 . . . 303,155					
1944 . . . 20,983	1951 . . . 44,549	1958 . . . 111,039	1965 . . . 222,185	1972 . . . 273,776	1979 . . . 310,648					
1945 . . . 25,551	1952 . . . 62,684	1959 . . . 121,013	1966 . . . 300,165	1973 . . . 294,223	1980 . . . 270,531					
1946 . . . 42,427	1953 . . . 104,809	1960 . . . 130,460	1967 . . . 316,100	1974 . . . 298,224	1981 . . . 313,982					
1947 . . . 26,559	1954 . . . 78,212	1961 . . . 168,960	1968 . . . 334,549	1975 . . . 288,067	1982 . . . 455,714					
1948 . . . 20,920	1955 . . . 70,041	1962 . . . 163,456	1969 . . . 289,268	1976 . . . 282,391	1983 . . . 367,272					
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988

BY REGION

East & South	20,701	22,007	23,493	37,150	42,031	48,848	51,676	42,406	(a)	27,141
Midwest	40,754	51,702	55,978	66,219	56,190	65,179	84,877	90,116	147,641	91,130
West	249,193	196,822	234,511	352,345	269,051	209,950	223,744	232,369	285,517	305,068

SIZE CLASSIFICATION

Retail	121,027	116,020	132,999	133,417	144,817	130,890	166,185	145,843	158,425	151,740
Food Service	36,484	34,725	43,026	43,350	55,405	54,569	58,767	72,802	70,065	76,093
Bulk	113,440	81,177	101,498	243,169	127,689	95,217	87,542	108,924	163,272	153,801
Subtotal	270,951	231,922	277,523	419,936	327,911	280,676	312,494	327,569	391,762	381,634
Other Uses	39,697	38,609	36,459	35,778	39,361	43,301	47,803	37,322	41,396	41,705
TOTAL ALL	310,648	270,531	313,982	455,714	367,272	323,977	360,297	364,891	433,158	423,339

(a) Included in Midwest

FROZEN SWEET CORN*—SUPPLY—STOCKS—MOVEMENT

Source: Economic Research Service, USDA; Packs, American Frozen Food Institute; Stocks, National Agricultural Statistics Service, USDA

MILLIONS OF POUNDS

Aug. 1 - Aug. 1	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
Carry-in 8/1	154.8	120.3	54.8	64.0	192.3	124.5	120.5	137.0	167.4	128.2
Pack	580.1	529.1	619.4	834.3	661.2	673.6	783.6	756.9	840.0	769.2
Packers Supply	734.9	649.4	674.2	898.3	853.5	798.1	904.1	893.9	1,007.4	897.5
Shipments 8/1-1/1	291.6	291.0	320.9	339.8	310.9	323.4	393.5	403.1	440.9	462.0
Stocks 1/1	443.3	358.4	353.3	558.5	542.6	474.7	510.6	490.8	566.5	435.5
Shipments 1/1-8/1	323.0	303.6	289.3	366.2	418.1	354.2	373.6	323.4	438.3	P
c/o Stocks 8/1	120.3	54.8	(e)64.0	192.3	124.5	120.5	137.0	167.4	128.2	P
Shipments 8/1-8/1	614.6	594.6	610.2	706.0	729.0	677.6	767.1	726.5	879.2	P

*Corn-on-cob and cut corn combined. (e) Estimate. P - Not available at press time

FROZEN OKRA PACKS IN THE U.S.

Compiled by The American Frozen Food Institute
Production Chiefly in the South—Thousands of Pounds

1947.....372	1953....12,285	1959....22,307	1965....30,365	1971....32,234	1977....41,551
1948.....1,526	1954....7,756	1960....17,955	1966....38,327	1972....27,924	1978....46,295
1949.....2,344	1955....13,647	1961....24,754	1967....47,465	1973....40,597	1979....33,305
1950.....2,620	1956....13,084	1962....23,084	1968....30,485	1974....42,992	1980....41,698
1951.....4,789	1957....17,071	1963....21,144	1969....38,250	1975....27,970	1981....43,774
1952.....8,427	1958....15,767	1964....35,451	1970....44,168	1976....27,489	1982....54,339

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
BY STYLE										
Whole	8,732	8,224	10,387	6,446	4,884	14,885	6,824	6,618	10,923	8,181
Cut	24,573	33,474	33,387	47,893	41,154	39,694	44,991	66,542	59,549	57,527
SIZE CLASSIFICATION										
Retail	27,186	30,993	23,171	18,459	24,135	18,491	30,247	29,777	23,945	28,787
Other	6,119	10,705	20,603	35,880	21,903	36,088	21,568	43,383	46,527	36,921
TOTAL PACK ...	33,305	41,698	43,774	54,339	46,038	54,579	51,815	73,160	70,472	65,708

FROZEN ONION PACKS IN THE U.S.

Compiled by The American Frozen Food Institute
Thousands of Pounds

1967....23,433	1969....37,881	1971....75,882	1973....114,679	1975....121,101	1977....152,718
1968....34,621	1970....52,205	1972....10,672	1974....111,228	1976....148,963	1978....154,080

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
BREADED RINGS¹										
TOTAL.....	70,140	63,104	80,398	80,120	51,071	55,211	39,392	68,892	75,428	49,334
FORMED RINGS										
3 to 8 ounce.....	4,570	2,501	2,025	7,232	12,605	21,820	*12,391	*37,431	*49,647	*18,738
12 to 32 ounce....	14,366	13,036	9,357							
2 to 20 pound	43,306	37,722	28,006	48,170	43,753	40,345	40,112	21,269	14,547	37,457
TOTAL.....	62,242	53,259	39,388	55,402	56,358	62,165	52,503	58,700	64,194	56,195
Total Rings.....	132,382	116,363	119,786	135,522	107,429	117,376	91,895	127,592	139,622	105,529
WHOLE, CHOPPED, ETC.²										
10 to 32 ounce....	649	666	3,754	3,920	3,682	3,734	6,797	2,232	1,403	8,659
Polybags	10,175	5,508	4,185	4,080	6,907	7,562	5,475	6,337	4,914	
3 to 20 lb.	2,604	6,015	3,122	3,256	3,527	1,599	7,206	5,666	4,684	5,851
Bulk	11,641	22,050	16,553	27,729	3,394	8,952	†18,843	†38,325	†29,219	†30,390
Sub Total	25,069	34,239	27,614	35,385	17,510	21,847	38,321	52,560	40,220	44,900
Other uses*	9,788	5,479	12,474	7,837	17,698	17,259	11,792	5,306	8,179	6,783
TOTAL.....	34,857	39,718	40,088	46,822	35,208	39,106	50,113	57,866	48,399	51,683
ALL STYLES										
TOTAL.....	167,239	156,081	159,874	182,344	142,637	156,482	142,008	185,458	188,021	157,212

¹Production chiefly in the Midwest. ²Includes whole, chopped, sliced, pearl, strips, etc. Production chiefly in the West. †Includes 21-60 lb. *Includes poly bag. **Initial frozen vegetable weight going into combination (mixed) vegetables and prepared foods.

FROZEN BLACK-EYED (AND OTHER SOUTHERN*) PEAS

Compiled by The American Frozen Food Institute

Thousands of Pounds

1948.....573	1954.....5,698	1960....16,678	1966....29,780	1972....38,004	1978....36,981
1949.....704	1955....10,227	1961....18,683	1967....44,236	1973....41,974	1979....21,099
1950....1,280	1956....6,737	1962....18,380	1968....25,579	1974....30,881	1980....20,933
1951....2,725	1957....11,624	1963....15,639	1969....20,647	1975....21,745	1981....33,404
1952....4,146	1958....13,012	1964....23,452	1970....30,084	1976....31,368	1982....23,821
1953....6,431	1959....14,821	1965....26,037	1971....33,027	1977....36,054	1983....22,926

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
BY TYPE										
Black-eyed	12,554	14,966	21,013	15,645	17,214	18,593	23,407	17,330	19,852	19,912
Other	8,545	5,967	12,391	8,176	5,712	9,614	8,268	5,256	9,151	10,246
SIZE CLASSIFICATION										
Retail	23,901	18,125	19,153	18,246	17,408	16,032	16,598	15,277	16,738	17,195
Other	†(2,802)	2,808	14,251	5,575	5,518	12,175	15,077	7,309	12,265	12,963
TOTAL PACK ...	21,099	20,933	33,404	23,821	22,926	28,207	31,675	22,586	29,003	30,158

*Includes crowder, field, lady, creme, purple hull, etc. †Deficit attributable to previous years carryover and imported product repacked in U.S.

FROZEN GREEN PEA PACKS IN THE U. S.

Compiled by The American Frozen Food Institute

Thousands of Pounds

1942...59,077	1949...113,273	1956...359,661	1963...344,784	1970...344,520	1977...333,954
1943...70,310	1950...152,275	1957...295,823	1964...336,931	1971...348,418	1978...357,717
1944...79,152	1951...195,541	1958...251,934	1965...443,289	1972...340,075	1979...427,461
1945...103,834	1952...203,726	1959...304,955	1966...375,360	1973...387,749	1980...315,577
1946...140,603	1953...226,664	1960...295,227	1967...424,246	1974...416,682	1981...333,888
1947...131,786	1954...206,854	1961...346,069	1968...439,352	1975...400,587	1982...404,830
1948...118,977	1955...231,216	1962...356,857	1969...367,323	1976...340,366	1983...354,480

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
BY REGION										
East & South	43,912	38,822	54,564	51,698	41,293	53,869	90,898	55,719	47,563	41,399
Midwest.....	54,463	43,016	44,300	78,374	60,236	73,220	118,229	100,895	110,960	68,986
Northwest.....	305,058	217,584	223,461	250,555	252,951	296,651	276,858	216,991	241,708	248,394
California.....	24,028	16,155	11,563	24,203						
SIZE CLASSIFICATION										
Retail	142,675	126,257	154,927	149,600	155,930	130,779	171,479	163,390	171,168	158,260
Food Service.....	62,923	54,027	61,720	50,375	57,234	63,031	65,082	67,761	64,054	74,326
Bulk	169,574	87,806	71,903	160,372	83,881	175,550	177,994	80,514	96,227	65,981
Subtotal	375,172	268,090	288,550	360,347	297,045	369,360	414,555	311,665	331,449	298,567
Other Uses	52,789	47,487	45,338	44,483	57,435	54,380	71,430	61,940	68,782	60,212
TOTAL PACK ...	427,461	315,577	333,888	404,830	354,480	423,740	485,985	373,605	400,231	358,779

FROZEN GREEN PEAS—SUPPLY—STOCKS—MOVEMENT

Source: Economic Research Service, USDA; Packs, American Frozen Food Institute; Stocks, National Agricultural Statistics Service, USDA

MILLIONS OF POUNDS

June 1 - June 1	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
Carry-in 6/1	82.9	122.5	68.8	55.0	92.5	82.5	119.9	164.0	131.8	97.6
Pack	427.5	315.6	333.9	404.8	354.5	423.7	486.0	373.6	400.2	358.8
Packers Supply....	510.4	438.1	402.7	459.8	447.0	506.2	605.9	537.6	532.0	456.4
Shipments 6/1-1/1	229.7	208.3	222.4	212.7	218.0	253.3	290.9	287.7	280.8	289.6
Stocks 1/1	280.7	229.8	180.3	247.1	229.0	252.9	315.0	249.9	251.2	166.8
Shipments 1/1-6/1	158.2	161.0	125.3	154.6	146.5	133.0	151.0	118.1	153.6	P
c/o Stocks 6/1....	122.5	68.8	55.0	92.5	82.5	119.9	164.0	131.8	97.6	P
Shipments 6/1-6/1	387.9	369.3	347.7	367.3	364.5	386.3	441.9	405.8	434.4	P

P - Not available at press time

FROZEN POTATO PACKS IN THE U. S.

Compiled by The American Frozen Food Institute

Thousands of Pounds									
1953.....	70,691	1959.....	371,048	1965....	1,218,529	1971....	2,565,118	1977....	3,622,823
1954.....	85,256	1960.....	551,392	1966....	1,459,634	1972....	2,593,848	1978....	3,848,810
1955.....	128,890	1961.....	579,162	1967....	1,490,809	1973....	2,691,072	1979....	4,089,732
1956.....	189,685	1962.....	761,609	1968....	1,796,055	1974....	2,984,881	1980....	3,853,156
1957.....	219,860	1963.....	861,537	1969....	2,048,408	1975....	3,000,983	1981....	4,236,239
1958.....	269,462	1964.....	1,117,883	1970....	2,404,389	1976....	3,335,051	1982....	4,377,228
	1981	1982	1983	1984	1985	1986	1987	1988	
TOTAL BY REGION									
California.....	11,607	9,267	8,534	20,855	12,813	10,060	(a)	(a)	
Northwest.....	3,338,380	3,377,783	3,484,868	3,867,330	3,937,933	3,934,368	4,217,499	4,617,000	
East, So. & MW...	886,252	990,178	1,016,503	844,709	1,167,356	1,204,720	1,070,135	1,146,671	
U.S. Total.....	4,236,239	4,377,228	4,509,905	4,732,894	5,118,102	5,149,148	5,287,634	5,763,671	
TOTAL BY STYLE									
French Fries.....	3,577,940	3,662,379	3,817,151	3,943,433	4,383,629	4,420,557	4,539,795	4,892,333	
Misc. Products....	658,299	714,849	692,754	789,461	734,473	728,591	747,839	871,338	
FRENCH FRIES									
Total Retail.....	562,258	540,596	476,670	498,534	538,663	483,598	531,135	544,169	
Tot. Food Service...	3,039,757	3,124,668	3,335,037	3,414,023	3,907,411	3,867,118	3,951,099	4,260,254	
Tot. Bulk.....	†(24,075)	†(2,885)	5,444	30,876	†(62,445)	69,841	57,561	87,910	
All French Fries...	3,577,940	3,662,379	3,817,151	3,943,433	4,383,629	4,420,557	4,539,795	4,892,333	

† Deficit attributable to previous years' carryover.

(a) Included in East, So. & MW.

PUMPKIN AND COOKED SQUASH

Compiled by The American Frozen Food Institute

Thousands of Pounds									
1942	2,633	1949	8,337	1956	24,158	1963	12,190	1970	27,241
1943	8,344	1950	8,325	1957	13,151	1964	11,243	1971	28,470
1944	10,002	1951	12,723	1958	18,007	1965	17,390	1972	29,708
1945	7,354	1952	15,068	1959	15,705	1966	19,697	1973	29,047
1946	10,009	1953	9,473	1960	23,447	1967	23,298	1974	32,641
1947	5,190	1954	13,036	1961	15,894	1968	24,672	1975	29,802
1948	5,577	1955	17,863	1962	12,101	1969	26,091	1976	22,177
1977	25,168	1978	25,058	1979	23,667	1980	23,000	1981	37,806
1982	24,897	1983	17,759	1984	15,824	1985	20,734	1986	22,319
1987	30,393	1988	23,870						
	1979	1980	1981	1982	1983	1984	1985	1986	1987
SIZE CLASSIFICATION									
Retail	11,955	9,944	17,249	9,533	8,126	6,677	7,901	9,492	10,009
Other	11,712	13,056	20,557	15,364	9,633	9,147	12,833	12,827	20,384
Total Pack	23,667	23,000	37,806	24,897	17,759	15,824	20,734	22,319	30,393

FROZEN SPINACH PACKS IN THE U. S.

Compiled by The American Frozen Food Institute

Thousands of Pounds									
1942 ...	16,575	1949 ...	62,307	1956 ...	104,511	1963 ...	119,768	1970 ...	145,694
1943 ...	24,648	1950 ...	52,806	1957 ...	102,130	1964 ...	126,957	1971 ...	156,991
1944 ...	31,947	1951 ...	97,878	1958 ...	97,472	1965 ...	122,264	1972 ...	160,050
1945 ...	36,721	1952 ...	91,464	1959 ...	121,904	1966 ...	142,931	1973 ...	159,501
1946 ...	38,185	1953 ...	87,927	1960 ...	118,595	1967 ...	153,228	1974 ...	177,892
1947 ...	23,279	1954 ...	66,901	1961 ...	116,505	1968 ...	153,960	1975 ...	129,399
1948 ...	41,571	1955 ...	110,347	1962 ...	97,291	1969 ...	107,182	1976 ...	160,247
1977 ...	167,766	1978 ...	147,389	1979 ...	181,279	1980 ...	169,298	1981 ...	183,646
1982 ...	150,667	1983 ...	143,205	1984 ...	171,249	1985 ...	174,802	1986 ...	157,119
1987 ...	171,208	1988 ...	172,849						
	1979	1980	1981	1982	1983	1984	1985	1986	1987
BY REGION									
East, South & MW.	13,756	8,598	28,112	26,907	27,153	38,733	42,548	46,042	53,742
West*	167,523	160,700	155,534	123,760	116,052	132,516	132,254	111,077	117,466
BY STYLE									
Leaf	97,552	90,228	93,795	68,463	58,763	77,821	74,494	64,120	68,489
Chopped	83,727	79,070	89,851	82,204	84,442	93,428	100,308	92,999	102,719
SIZE CLASSIFICATION									
Retail	102,922	101,528	100,805	84,429	71,763	88,034	93,821	82,442	91,023
Food Service	74,039	65,657	79,989	60,230	66,460	71,603	72,144	68,406	70,071
Bulk	4,318	2,113	2,852	6,008	4,982	11,612	8,837	6,271	10,114
Total Pack	181,279	169,298	183,646	150,667	143,205	171,249	174,802	157,119	171,208

* California only beginning in 1985.

FROZEN SPINACH—SUPPLY—STOCKS—MOVEMENT

Source: Economic Research Service, USDA: Packs, American Frozen Food Institute;
Stocks, National Agricultural Statistics Service, USDA

MILLIONS OF POUNDS

Mar. 1 - Mar. 1	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
Carry-in 3/1	19.1	30.3	33.1	40.7	28.7	25.2	26.9	33.7	28.4	36.9
Pack	181.3	169.3	183.6	150.7	143.2	171.2	174.8	157.1	171.2	172.8
Packer Supply ...	200.4	199.6	216.7	191.3	171.9	196.4	201.7	190.8	199.6	209.7
Shipments 3/1-1/1	141.6	146.4	153.6	138.8	129.6	151.1	149.1	144.9	148.8	174.7
Stocks 1/1	58.8	53.2	63.1	52.5	42.3	45.3	52.6	45.9	50.8	35.0
Shipments 1/1-3/1	28.5	20.1	22.4	23.8	17.1	18.4	18.9	17.5	13.9	P
c/o Stocks 3/1	30.3	33.1	40.7	28.7	25.2	26.9	33.7	28.4	36.9	P
Shipments 3/1-3/1	170.0	166.6	176.0	162.6	146.7	169.5	168.0	162.4	162.7	P

P - Not available at press time

FROZEN SUMMER SQUASH PACKS IN THE U. S.

(All Types, Including Zucchini)

Compiled by The American Frozen Food Institute

Thousands of Pounds

1961	5,926	1965	10,987	1969	17,318	1973	26,343	1977	41,598
1962	8,022	1966	11,990	1970	18,953	1974	31,330	1978	43,826
1963	8,881	1967	10,467	1971	26,882	1975	27,906	1979	38,149
1964	6,316	1968	12,832	1972	28,494	1976	35,377	1980	36,737

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
SUMMER SQUASH										
Retail	3,728	2,971	2,197	1,984	2,692	3,523	1,696	2,853	2,131	1,884
Food Service	7,390	9,526	9,505	15,342	12,240	9,768	12,569	12,956	10,664	13,061
Bulk	2,706	3,030	2,508	3,980	5,878	6,989	9,902	12,895	10,636	8,866
Other Uses .....	.....	2,959	984	605	230	6,810	(a)	(a)	(a)	(a)
TOTAL	13,824	18,486	15,194	21,911	21,040	27,090	24,167	28,704	23,431	23,811
ZUCCHINI										
Retail	2,748	2,014	2,035	1,682	2,024	3,741	3,256	4,732	3,670	4,673
Food Service	6,754	8,266	6,727	15,240	16,391	9,740	16,345	18,528	17,037	19,836
Bulk	9,993	2,015	18,968	18,229	17,469	18,281	15,207	19,314	22,289	15,936
Other Uses	4,830	5,956	3,909	8,117	5,814	7,615	8,483	4,716	4,572	5,705
TOTAL	24,325	18,251	31,639	43,268	41,698	39,377	43,291	47,290	47,568	46,150
ALL TYPES										
Retail	6,476	4,985	4,232	3,666	4,716	7,264	4,952	7,585	5,801	6,557
Food Service	14,144	17,792	16,232	30,582	28,631	13,508	28,914	31,484	27,701	32,897
Bulk	12,699	5,045	21,476	22,209	23,347	25,270	25,109	32,209	32,925	24,802
Other Uses	4,830	8,915	4,893	8,722	6,044	14,425	8,483	4,716	4,572	5,705
TOTAL ALL	38,149	36,737	46,833	65,179	62,738	66,467	67,458	75,994	70,999	69,961

(a) Included in bulk.

ODDS are
that you are
"borrowing" the
ALMANAC

Why not order
a copy of your
own or better
yet a crisp new one
for the "borrower"

Box 866
Westminster,
Md. 21157
301-876-2052

FROZEN VEGETABLE MIXES

Compiled by The American Frozen Food Institute
Thousands of Pounds

The following vegetable mixes are reported separately and are not included in total industry vegetable production data which represents first freezing, including the mix components.

1971... 185,039	1973... 161,124	1975... 188,470	1977... 193,133	1979... 221,279	1981... 229,081
1972... 190,771	1974... 209,917	1976... 164,575	1978... 178,566	1980... 237,436	1982... 198,624

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
MIXED VEGETABLES										
Retail	91,632	102,999	93,180	82,633	97,973	96,535	100,123	101,677	99,672	132,601
Food Service	38,131	41,697	60,689	46,759	51,389	45,600	48,262	58,573	60,976	52,446
Bulk	28,397	27,803	10,737	11,773	7,917	20,423	29,966	24,480	24,524	19,977
Total	158,160	172,499	164,606	141,165	157,279	162,558	178,351	184,730	185,172	205,024
PEAS & CARROTS										
Retail	23,628	24,312	23,178	20,274	21,845	22,452	24,580	23,258	23,340	24,728
Food Service†	6,246	6,346	7,001	6,169	6,232	6,122	7,089	8,670	9,782	8,940
Bulk†	2,162	2,550	3,070	3,096	3,161	3,424	3,218	4,508	3,941	3,985
Total	32,036	33,208	33,249	29,539	31,238	31,998	34,887	36,436	37,063	37,653
PEAS & PEARL ONIONS										
Retail	4,555	4,341	6,236	4,179	5,729	5,651	6,714	6,111	3,590	6,280
Food Service	3,185	3,705	4,024	3,255	2,842	3,826	4,460	3,581	4,412	3,243
Total	7,740	8,046	10,260	7,434	8,571	9,477	11,174	9,692	8,002	9,523
STEW VEGETABLES										
Retail	15,728	15,624	13,295	12,121	12,230	15,921	17,216	17,221	16,831	16,972
Food Service	596	1,323	1,071	1,787	2,131	3,956	2,985	2,315	1,515	1,610
Total	16,324	16,947	14,366	13,908	14,361	19,877	20,201	19,536	18,346	18,582
SUCCOTASH										
Retail	4,637	4,341	4,112	4,032	3,700	3,385	4,308	4,447	4,547	4,234
Food Service	2,382	2,395	2,488	2,546	2,337	2,094	2,533	2,636	2,464	2,976
Bulk			(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Total	7,019	6,736	6,600	6,578	6,037	5,479	6,841	7,083	7,011	7,210
TOTAL ALL ...	221,279	237,436	229,081	198,624	217,486	229,339	251,454	257,477	255,594	277,992

† Beginning 1979, 20lb. containers previously included in Food Service are included in bulk. (a) Some containers over 20lb. included with Food Service. Generally Retail includes up to 40 oz. poly; Food Service from 2lb. carton thru 20lb.; Bulk over 23lb.

FROZEN VEGETABLE COMBINATIONS/OR BLENDS

Compiled by The American Frozen Food Institute
Thousands of Pounds

The following combinations are reported separately and are not included in total industry vegetable production data which represents first freezing, including the mix components.

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
CALIFORNIA BLEND (generally includes Broccoli, Cauliflower & Carrots)										
Retail	15,808	24,161	20,573	36,778	41,046	48,744	63,627	54,686	46,073	64,128
Food Service¹	466	745	4,038	4,421	7,025	5,716	3,740	7,413	9,633	8,810
Bulk¹	1,240	3,335	4,458	7,402	10,684	16,096	11,023	11,800	16,427	10,084
Total	17,514	28,241	29,069	48,601	58,755	70,556	78,390	73,899	72,133	83,022
ITALIAN BLEND (generally includes Cauliflower, Zucchini, Italian gr. beans & onions)										
Retail	15,939	12,364	13,841	11,785	15,176	16,170	22,516	19,680	17,829	18,614
Food Service¹	908	3,730	4,145	3,546	5,655	5,637	1,100	2,580	3,772	4,038
Bulk¹	2,339	3,255	2,940	4,758	7,314	8,260	7,873	6,994	6,345	5,708
Total	19,186	19,349	20,926	20,089	28,145	30,067	31,489	29,254	27,946	28,360
ORIENTAL BLEND (generally includes Green Beans, Broccoli, Onions & Mushrooms)										
Retail	27,725	21,583	25,719	37,804	39,987	43,445	41,559	39,387	29,885	27,014
Food Service/Bulk	1,023	1,758	1,861	4,382	7,513	7,709	6,473	4,944	5,920	6,311
Total	28,748	23,341	27,580	42,186	47,500	51,154	48,032	44,331	35,805	33,325
WINTER BLEND (generally includes Broccoli & Cauliflower)										
Retail	10,319	16,722	9,604	15,656	21,622	22,379	29,614	27,327	24,806	18,994
Food Service/Bulk	1,613	2,566	3,779	4,469	4,974	6,496	8,350	14,393	5,087	5,972
Total	11,932	19,288	13,383	20,125	26,596	28,875	37,964	41,720	29,893	24,966
NORTHWEST BLEND (generally includes Corn, Green Beans, sl. Carrots & Peas)										
Total	n.a.	n.a.	n.a.	2,600	13,248	14,134	18,002	14,985	3,698	3,545
MISCELLANEOUS BLENDS										
Total	91,858	110,871	141,991	81,745	76,144	86,793	110,686	114,159	146,218	210,673
TOTAL BLENDS	169,238	201,090	235,549	225,994	251,274	282,526	324,563	313,348	315,693	383,891

¹20lb. included with Bulk. n.a. Not available.

TOTAL U.S. FROZEN FRUIT AND BERRY PACKS

Compiled by The American Frozen Food Institute

Thousands of Pounds

1942... 194,643	1949... 354,021	1956... 694,327	1963... 619,514	1970... 620,688	1977... 687,409
1943... 187,267	1950... 472,173	1957... 671,374	1964... 795,154	1971... 665,478	1978... 542,566
1944... 323,886	1951... 415,945	1958... 610,387	1965... 653,452	1972... 612,062	1979... 574,864
1945... 427,038	1952... 420,303	1959... 617,576	1966... 663,570	1973... 650,164	1980... 653,402
1946... 519,093	1953... 541,961	1960... 659,718	1967... 641,813	1974... 602,104	1981... 625,923
1947... 343,520	1954... 522,990	1961... 704,926	1968... 728,457	1975... 566,825	1982... 614,315
1948... 369,723	1955... 659,787	1962... 668,118	1969... 678,283	1976... 628,513	1983... 574,269

TOTAL FROZEN FRUIT AND BERRY PACKS BY REGION

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Northeast	59,114	64,046	49,980	60,724	45,695	54,403	52,384	96,622	99,408	121,088
South	(a)	(a)	13,504	12,803	(a)	(a)	(a)	(a)	(a)	(a)
Midwest	134,803	156,100	138,792	63,787	61,252	72,417	82,350	94,012	131,203	141,801
West	380,947	433,256	423,647	477,001	467,322	435,400	418,146	456,941	619,551	566,857
Total	574,864	653,402	625,923	614,315	574,269	562,220	552,880	647,575	850,162	829,746

NORTHEAST: Conn., Me., Mass., N.J., N.Y., Pa., R.I., and Vt.

SOUTH: Ala., Ark., Del., Fla., Ga., Ky., La.,

Md., Miss., Mo., N.C., Okla., S.C., Tenn., Tex., Va., and W. Va.

MIDWEST: Ill., Ind., Mich., Minn., Neb., Ohio

and Wis. WEST: Ariz., Calif., Colo., Hawaii, Idaho, Mont., Ore., Utah and Wash.

(a) Included in Northeast.

FROZEN FRUIT AND BERRY PACK BY COMMODITY

Product	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Apples	60,827	69,109	105,893	100,378	75,576	77,996	85,481	111,133	122,399	117,076
Apricots	16,941	10,409	13,606	16,766	14,077	16,565	11,770	14,308	22,227	14,675
Cherries, R.S.P. ...	116,300	129,009	85,848	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Cherries, Sweet ..	13,262	10,776	14,209	17,206	17,303	13,282	10,262	14,404	21,332	18,482
Grapes & Pulp ...	2,264	2,178	2,901	8,442	10,006	(a)	4,715	(a)	(a)	(a)
Peaches	62,510	56,274	59,612	56,714	56,454	75,877	80,990	100,730	105,764	110,286
Plums & Prunes ..	5,649	6,195	4,348	5,631	2,646	3,436	4,400	4,354	657	2,713
Purees, Non Cit ..	12,251	8,913	13,128	20,268	16,169	15,645	24,655	29,424	39,749	22,501
Blackberries	14,823	20,874	16,997	16,283	14,581	11,130	12,681	12,955	21,027	21,437
Blueberries	31,485	36,426	50,141	46,464	43,528	54,835	54,506	77,754	69,153	82,382
Boysenberries ...	2,732	4,678	3,627	5,101	3,549	3,524	2,561	5,493	5,234	6,706
Currants	475	461	330	(a)	(a)	(a)	(a)	(a)	n.a.	n.a.
Loganberries	1,276	1,905	1,552	1,665	2,223	1,018	775	1,133	1,016	1,461
Loganberries	3,082	3,646	374	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Raspberries, B ...	3,907	2,786	3,368	4,320	1,176	1,333	990	1,678	2,001	2,518
Raspberries, R ...	19,611	18,640	22,811	22,397	18,679	18,326	13,794	13,645	24,470	23,991
Strawberries	190,572	253,072	210,558	272,676	292,662	231,414	229,152	237,604	334,406	274,610
Misc. Fru & Ber ..	16,897	18,051	16,620	20,004	5,640	37,839	16,148	22,960	80,727	130,908
Total	574,864	653,402	625,923	614,315	574,269	562,220	552,880	647,575	850,162	829,746

(a) Included with Miscellaneous.

*Due to lack of cooperation RSP Cherries removed from reports.

n.a. - Not available.

FROZEN APPLE PACKS IN THE U.S.

Thousands of Pounds

1942... 15,110	1949... 52,268	1956... 86,956	1963... 75,429	1970... 100,370	1977... 97,204
1943... 27,810	1950... 48,013	1957... 69,225	1964... 86,893	1971... 96,999	1978... 68,337
1944... 52,391	1951... 28,772	1958... 67,407	1965... 93,392	1972... 130,377	1979... 60,827
1945... 92,985	1952... 37,649	1959... 72,313	1966... 94,352	1973... 135,086	1980... 69,109
1946... 78,220	1953... 42,356	1960... 69,853	1967... 97,634	1974... 99,180	1981... 105,893
1947... 28,573	1954... 60,094	1961... 80,117	1968... 117,218	1975... 89,704	1982... 100,378
1948... 27,552	1955... 72,756	1962... 65,874	1969... 122,293	1976... 118,759	1983... 75,576

BY REGION

Northeast/South	11,529	13,882	21,191	37,101	21,446	21,351	21,750	44,532	45,974	57,955
Midwest	29,170	29,101	40,202	37,920	30,240	32,051	41,993	48,307	48,216	31,232
West	20,128	26,126	44,500	25,357	23,890	24,594	21,738	18,294	28,209	27,889

SIZE CLASSIFICATION

20 lb. and less ...	5,310	8,545	4,261	6,080	11,118	11,235	14,890	29,223	8,572	583
25 to 29 lb.	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	22,938	20,578
30 lb.	34,240	41,760	67,208	72,255	44,420	43,667	19,765	45,812	49,450	51,868
32 to 60 lb.	4,173	3,352	7,103	4,058	4,750	3,574	3,132	19,580	23,155	20,737
1 Q F	14,307	15,452	21,707	17,985	17,039	19,520	27,212	19,973	23,465	21,963
Barrels	2,797	(d)	5,614	(d)	(1,751)	(d)	20,482	(3,455)	(5,181)	1,347

Total Pack	60,827	69,109	105,893	100,378	75,576	77,996	85,481	111,133	122,399	117,076
------------------	--------	--------	---------	---------	--------	--------	--------	---------	---------	---------

(c) Included in 20 lb. and less.

(d) Included in IQF.

¹Deficit attributable to previous year carryover.

FROZEN R.S.P. CHERRY PACKS IN THE U.S.

Compiled by The American Frozen Food Institute

Thousands of Pounds

1942 ... 41,820	1949 ... 70,989	1956 ... 88,734	1963 ... 81,644	1970 ... 121,271	1977 ... 154,600
1943 ... 23,005	1950 ... 104,459	1957 ... 130,571	1964 ... 202,522	1971 ... 159,408	1978 ... 126,300
1944 ... 55,059	1951 ... 99,282	1958 ... 86,195	1965 ... 146,355	1972 ... 145,408	1979 ... 116,300
1945 ... 16,144	1952 ... 61,867	1959 ... 107,447	1966 ... 87,367	1973 ... 109,368	1980 ... 129,009
1946 ... 88,061	1953 ... 115,242	1960 ... 129,029	1967 ... 97,792	1974 ... 137,976	1981 ... 85,848
1947 ... 67,002	1954 ... 86,695	1961 ... 186,440	1968 ... 141,515	1975 ... 126,073	1982 ... Reports discontinued
1948 ... 87,798	1955 ... 114,465	1962 ... 137,293	1969 ... 140,688	1976 ... 84,113	

FROZEN PEACH PACKS IN THE U. S.

Compiled by The American Frozen Food Institute

Thousands of Pounds

1942 ... 13,801	1949 ... 23,235	1956 ... 45,481	1963 ... 65,607	1970 ... 47,471	1977 ... 69,323
1943 ... 17,009	1950 ... 25,791	1957 ... 44,462	1964 ... 76,250	1971 ... 59,924	1978 ... 40,814
1944 ... 45,563	1951 ... 32,380	1958 ... 43,478	1965 ... 59,453	1972 ... 46,316	1979 ... 62,510
1945 ... 103,634	1952 ... 35,454	1959 ... 47,259	1966 ... 65,190	1973 ... 81,388	1980 ... 56,274
1946 ... 65,140	1953 ... 32,171	1960 ... 72,928	1967 ... 73,358	1974 ... 59,058	1981 ... 59,612
1947 ... 27,034	1954 ... 36,380	1961 ... 60,774	1968 ... 82,035	1975 ... 40,273	1982 ... 56,714
1948 ... 13,598	1955 ... 50,636	1962 ... 53,570	1969 ... 53,572	1976 ... 65,101	1983 ... 56,454

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
BY REGION										
West	n.a.	n.a.	n.a.	54,356	n.a.	70,589	n.a.	n.a.	n.a.	n.a.
Other	n.a.	n.a.	n.a.	2,358	n.a.	5,288	n.a.	n.a.	n.a.	n.a.
SIZE CLASSIFICATION*										
Retail	(a)	(a)	(a)	(a)	(a)	(a)	2,295	(a)	2,095	4,053
Food Service †...	8,824	7,518	8,542	8,509	9,290	9,693	13,085	15,911	10,940	2,252
30 lb.	5,281	2,168	6,539	5,090	1,254	851	(b)	13,758	23,356	(b)
32 lb.	13,490	12,069	11,184	12,519	14,347	14,522	14,085	15,266	6,680	18,463
Large (over 10 lb.)	15,833	13,534	20,649	14,437	5,357	22,096	27,645	24,711	11,681	71,885
I.Q.F.	(c)	(c)	(c)	11,013	(c)	(c)	(c)	21,255	38,183	(c)
Barrels	19,082	20,985	12,698	5,146	26,206	28,715	23,880	9,829	12,829	13,633
Total Pack	62,510	56,274	59,612	56,714	56,454	75,877	80,990	100,730	105,764	110,286

† 10 lb. & less. (a) Included with Food Service. (b) Included with 32 lb. (c) Included with Barrels.
n.a. - Not available. *Small quantities of various sizes were combined with nearest container size.

FROZEN BLACKBERRY PACKS IN THE U.S.

(All varieties except Olallie Berries)

Compiled by The American Frozen Food Institute

Thousands of Pounds

1942 ... 8,229	1949 ... 15,186	1956 ... 12,845	1963 ... 20,675	1970 ... 29,186	1977 ... 23,352
1943 ... 8,310	1950 ... 8,973	1957 ... 19,157	1964 ... 23,851	1971 ... 27,536	1978 ... 19,579
1944 ... 16,173	1951 ... 14,574	1958 ... 13,604	1965 ... 23,251	1972 ... 21,164	1979 ... 14,823
1945 ... 21,503	1952 ... 10,628	1959 ... 15,770	1966 ... 25,812	1973 ... 8,249	1980 ... 20,874
1946 ... 19,750	1953 ... 17,966	1960 ... 26,970	1967 ... 20,722	1974 ... 21,107	1981 ... 16,997
1947 ... 14,510	1954 ... 14,156	1961 ... 22,562	1968 ... 22,381	1975 ... 20,892	1982 ... 16,283
1948 ... 9,745	1955 ... 16,539	1962 ... 22,532	1969 ... 27,184	1976 ... 22,774	1983 ... 14,581

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
SIZE CLASSIFICATION										
20 lb. & under ...							1,921	1,546	1,549	2,565
28 & 30 lb.	3,140	8,987	6,077	6,056	3,660	1,456	3,383	1,701	3,394	2,726
I.Q.F.	2,261	2,804	6,805	6,438	5,004	4,854	3,309	6,282	13,190	11,406
Other	758	415	2,845	684	2,853	(b)	(b)	(b)	(b)	(b)
Barrels	8,664	8,668	1,270	3,105	3,064	4,820	4,068	3,426	2,894	4,740
Total Pack	14,823	20,874	16,997	16,283	14,581	11,130	12,681	12,955	21,027	21,437

(b) Included in I.Q.F.

FROZEN BLUEBERRY PACKS IN THE U. S.

Thousands of Pounds									
1942 ... 1,716	1949 ... 14,036	1956 ... 19,639	1963 ... 25,767	1970 ... 21,836	1977 ... 14,750				
1943 ... 2,700	1950 ... 10,900	1957 ... 24,446	1964 ... 30,574	1971 ... 30,441	1978 ... 27,992				
1944 ... 4,963	1951 ... 13,921	1958 ... 15,982	1965 ... 27,981	1972 ... 30,932	1979 ... 31,485				
1945 ... 7,829	1952 ... 9,848	1959 ... 16,393	1966 ... 35,403	1973 ... 44,376	1980 ... 36,426				
1946 ... 10,240	1953 ... 13,988	1960 ... 25,230	1967 ... 31,828	1974 ... 24,393	1981 ... 50,141				
1947 ... 5,407	1954 ... 20,971	1961 ... 21,990	1968 ... 27,750	1975 ... 24,572	1982 ... 46,464				
1948 ... 7,661	1955 ... 21,020	1962 ... 26,452	1969 ... 37,663	1976 ... 26,261	1983 ... 43,528				

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
BY REGION										
Northeast*	16,671	16,202	21,372	26,427	21,747	30,013	29,133	43,402	40,839	47,032
Midwest	12,854	18,189	25,927	16,172	17,686	22,471	21,653	31,323	23,283	27,606
West	1,960	2,035	2,842	3,865	4,095	2,351	3,720	3,029	5,031	7,744

SIZE CLASSIFICATION										
10 lb. & less	1,367	877	2,860	3,652	3,422	5,545	6,359	5,360	6,733	25,160
20 lb.	1,082	672	766	(a)	(a)	3,656	11,879	9,609	9,262	
30 lb.	17,019	21,994	31,981	34,888	35,237	46,116	27,795	52,474	44,751	50,027
Other (over 10 lb)	655	840	3,339	6,481	573	5,077		10,559	12,325	1,519
I.Q.F.	7,472	9,759	5,231	4,079	4,814	7,469	16,412	16,615	18,308	15,867
Barrels	3,890	1,717	4,964	†(2,636)	†(518)	†(9,372)	284	†(19,130)	†(22,573)	†(19,453)
Total Pack	31,485	36,426	50,441	46,464	43,528	54,835	54,506	77,754	69,153	82,382

(a) Included in "Other". *Includes small southern pack. †Deficit attributable to previous years carryover.

FROZEN RED RASPBERRY PACKS IN THE U. S.

Thousands of Pounds - Compiled by The American Frozen Food Institute

1942 ... 14,206	1949 ... 25,682	1956 ... 9,184	1963 ... 31,441	1970 ... 25,409	1977 ... 23,222				
1943 ... 14,608	1950 ... 20,439	1957 ... 30,365	1964 ... 25,335	1971 ... 24,467	1978 ... 19,742				
1944 ... 13,117	1951 ... 19,414	1958 ... 24,463	1965 ... 27,631	1972 ... 20,485	1979 ... 19,611				
1945 ... 13,255	1952 ... 18,365	1959 ... 24,691	1966 ... 31,575	1973 ... 26,625	1980 ... 18,640				
1946 ... 23,905	1953 ... 24,895	1960 ... 28,041	1967 ... 27,394	1974 ... 20,323	1981 ... 22,81*				
1947 ... 25,401	1954 ... 23,502	1961 ... 23,127	1968 ... 23,078	1975 ... 24,666	1982 ... 22,35				
1948 ... 23,198	1955 ... 25,730	1962 ... 27,631	1969 ... 27,657	1976 ... 20,841	1983 ... 18,679				

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
SIZE CLASSIFICATION										
Retail	4,051	3,149	3,852	4,739	4,504	4,665	6,860	3,141	5,058	5,316
Food Service	845	515	515	274	802	761	2,024	1,488	1,801	2,601
Bulk	14,715	14,976	18,444	17,384	13,373	12,900	4,910	9,016	17,611	16,074
Total Pack	19,611	18,640	22,811	22,397	18,679	18,326	13,794	13,645	24,470	23,991

FROZEN STRAWBERRY PACKS IN THE U.S.

Thousands of Pounds - Compiled by the American Frozen Food Institute

1942 ... 63,776	1949 ... 107,600	1956 ... 312,293	1963 ... 234,440	1970 ... 201,572	1977 ... 220,391				
1943 ... 29,829	1950 ... 192,732	1957 ... 259,262	1964 ... 252,646	1971 ... 199,399	1978 ... 159,834				
1944 ... 34,826	1951 ... 157,729	1958 ... 261,529	1965 ... 191,613	1972 ... 146,842	1979 ... 187,572				
1945 ... 36,917	1952 ... 200,302	1959 ... 248,227	1966 ... 236,492	1973 ... 168,552	1980 ... 253,072				
1946 ... 78,059	1953 ... 225,963	1960 ... 217,477	1967 ... 213,340	1974 ... 170,371	1981 ... 210,558				
1947 ... 109,036	1954 ... 221,446	1961 ... 222,694	1968 ... 213,275	1975 ... 183,895	1982 ... 272,676				
1948 ... 160,077	1955 ... 272,970	1962 ... 234,620	1969 ... 178,693	1976 ... 216,153	1983 ... 292,662				

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
BY REGION										
South & Midwest*	6,698	14,814	7,195	4,225	7,315	3,451	5,003	6,442	4,305	3,481
Northwest	52,141	60,644	59,235	68,875	90,638	63,210	60,092	51,806	80,722	82,863
California	131,733	177,614	144,128	199,576	194,709	164,753	163,077	179,356	249,379	188,266
BY STYLE										
Whole	82,994	137,380	96,770	117,277	129,441	109,004	108,145	101,189	145,151	132,224
Sliced	104,578	115,692	113,788	155,399	163,221	122,410	121,007	136,415	189,255	142,386
Total	187,572	253,072	210,558	272,676	292,662	231,414	229,152	237,604	334,406	274,610
SIZE CLASSIFICATION*										
Retail	61,268	66,675	49,126	66,457	55,852	58,988	54,003	46,936	55,119	54,234
Food Service	23,766	23,953	29,644	35,494	51,005	32,760	34,915	43,503	66,125	58,265
Bulk	105,538	162,444	131,788	170,725	185,805	139,666	140,234	147,165	213,162	162,111
Total Pack	187,572	253,072	210,558	272,676	292,662	231,414	229,152	237,604	334,406	274,610

*Includes production in New York thru 1981. †10 lb. packages are classified Bulk. †Totals revised. Revised breakdowns by Region & Size Classification not available. Breakdowns therefore do not add to revised totals.

FROZEN CONCENTRATED CITRUS JUICES(a)

Source: Florida Citrus Processors Association and American Frozen Food Institute.
Thousands of Gallons Concentrated (Unreconstituted) Basis

Year	Orange	Grapefruit	Lemon	Grapefruit Orange	Lemonade	Tangerine	Limeade
1948-49	12,196	116	n.a.	112	n.a.	n.a.	n.a.
1949-50	25,137	1,665	91	1,336	1,702	n.a.	n.a.
1950-51	34,938	1,888	205	245	3,437	n.a.	n.a.
1951-52	47,743	1,098	317	536	5,751	349	n.a.
1952-53	51,264	1,226	574	480	8,628	551	n.a.
1953-54	66,978	1,677	1,316	965	9,845	443	n.a.
1954-55	65,481	1,155	908	561	8,268	877	992
1955-56	69,592	2,542	854	954	10,388	619	1,320
1956-57	72,455	2,949	1,691	597	10,031	793	684
1957-58	64,000	3,330	233*	507	11,850*	141	438
1958-59	79,981	4,952	2,216	690	12,807	1,152	885
1959-60	77,999	1,639	1,150*	284	14,750*	324	845
1960-61	84,374	3,841	93*	256	8,450*	1,407	728
1961-62	115,866	3,163	n.a.	267	n.a.	1,370	822
1962-63	51,648	2,323	n.a.	53	n.a.	205	546
1963-64	53,674	2,573	n.a.	130	n.a.	1,146	1,196
1964-65	88,869	4,000	n.a.	70	n.a.	1,154	656
1965-66	76,695	3,971	n.a.	50	n.a.	715	590
1966-67	131,755	5,485	n.a.	29	n.a.	1,120	503
1967-68	83,697	1,814	n.a.	10	n.a.	582	983
1968-69	103,750	5,920	n.a.	36	n.a.	1,051	852
1969-70	124,947	4,294	n.a.	16	n.a.	785	1,345
1970-71	125,187	5,870	n.a.	18	n.a.	1,090	1,648
1971-72	134,229	8,798	n.a.	22	n.a.	1,220	1,498
1972-73	176,073	8,658	n.a.	3	n.a.	1,072	936
1973-74	171,846	9,026	n.a.	11	n.a.	1,019	1,530
1974-75	178,174	7,847	n.a.	4	n.a.	1,147	1,921
1975-76	186,265	9,316	n.a.	-	n.a.	1,111	1,307
1976-77	158,035	11,258	n.a.	-	n.a.	926	1,272
1977-78	161,203	13,692	n.a.	-	n.a.	1,671	1,853
1978-79	173,053	14,243	n.a.	-	n.a.	1,367	2,624
1979-80	231,257	19,443	n.a.	-	n.a.	2,142	1,851
1980-81	174,537	20,763	n.a.	-	n.a.	1,175	n.a.
1981-82	133,294	21,869	n.a.	-	n.a.	924	n.a.
1982-83	169,577	14,483	n.a.	-	n.a.	334	n.a.
1983-84	121,216	19,291	n.a.	-	n.a.	636	n.a.
1984-85	118,472	24,802	n.a.	-	n.a.	285	n.a.
1985-86	132,406	24,162	n.a.	-	n.a.	368	n.a.
1986-87	145,056	28,875	n.a.	-	n.a.	373	n.a.
1987-88	169,973	31,906	n.a.	-	n.a.	583	n.a.

*Trade estimate only - not verified. n.a.-Not available. NOTE: Prior to 1965-66, production was reported on a 42° Brix basis; on a 45° Brix basis 1966-67 thru 1979-80; on a 43.4° Brix basis in 1980-81; on a 42° Brix basis since 1981. (a) Not included in Fruit & Berry Pack totals.

NON-CITRUS CONCENTRATES AND JUICES(a)

Thousands of Gallons

1958	814	1964	2,843	1970	1,534	1976	2,512	1982	23,778
1959	1,911	1965	749	1971	2,088	1977	3,003	1983	26,022
1960	1,425	1966	735	1972	2,824	1978	6,005	1984	28,884
1961	1,625	1967	603	1973	2,518	1979	5,340	1985	20,826
1962	2,285	1968	431	1974	3,479	1980	6,311	1986	22,673
1963	4,136	1969	1,661	1975	4,389	1981	18,472	1987	13,359
								1988	21,040

(a) Not included in Fruit & Berry Pack totals.

FROZEN FRUIT AND BERRY—SUPPLY—STOCKS—MOVEMENT

Source: Economic Research Service, USDA; Pack data from American Frozen Food Institute; stocks, Statistical Reporting Service USDA; imports, Bureau of Census, U.S. Department of Commerce.

MILLION POUNDS

Items and season	Carryin	Pack	Imports	Total supply	Disappear- ance to Mar. 31	Stocks Mar. 31	Total season disappear- ance
Apples							
1980/81.....	36.0	69.1	-	105.1	28.2	76.9	65.1
1981/82.....	40.0	105.9	-	145.9	73.9	72.0	115.3
1982/83.....	30.6	100.4	-	131.0	63.7	67.3	94.1
1983/84.....	36.9	75.6	-	112.5	31.1	81.4	81.3
1984/85.....	31.2	78.0	-	109.2	45.6	63.6	77.2
1985/86.....	32.0	85.5	-	117.5	43.0	74.5	73.1
1986/87.....	44.4	111.1	-	155.5	81.4	74.1	114.5
1987/88.....	41.0	122.4	-	163.4	76.5	86.9	125.9
1988/89.....	37.5	117.1	-	154.6	72.2	82.4	P
Apricots							
1980/81.....	5.4	10.4	-	15.8	11.5	4.3	12.9
1981/82.....	2.9	13.6	-	16.5	13.0	3.5	13.0
1982/83.....	3.5	16.8	-	20.3	14.4	5.9	16.7
1983/84.....	3.6	14.1	-	17.7	12.5	5.2	13.9
1984/85.....	3.8	16.7	-	20.5	14.1	6.4	15.8
1985/86.....	4.7	11.8	-	16.5	12.0	4.5	13.2
1986/87.....	3.3	14.3	-	17.6	15.1	2.5	16.4
1987/88.....	1.2	22.2	-	23.4	18.4	5.0	20.0
1988/89.....	3.4	14.7	-	18.1	14.2	3.9	P
Cherries*							
1980/81.....	28.2	139.8	-	168.0	108.0	60.0	131.4
1981/82.....	36.6	100.0	-	136.6	90.2	46.4	108.1
1982/83.....	28.5	176.4	-	204.9	161.6	43.3	183.1
1983/84.....	4.9	17.3	-	22.2	12.7	9.5	16.1
1984/85.....	6.1	13.3	-	19.4	8.5	10.9	12.8
1985/86.....	6.6	10.3	-	16.9	5.8	11.1	9.8
1986/87.....	7.1	14.4	-	21.5	13.2	8.3	15.1
1987/88.....	6.4	21.3	-	27.7	18.2	9.5	20.9
1988/89.....	6.8	18.5	-	25.3	7.5	17.8	P
Peaches							
1980/81.....	20.3	56.3	-	76.6	41.0	35.6	54.7
1981/82.....	21.9	59.6	-	81.5	43.7	37.8	56.6
1982/83.....	24.9	56.7	-	81.6	46.3	35.3	59.3
1983/84.....	22.3	56.5	-	78.8	51.7	27.1	65.1
1984/85.....	13.7	75.9	-	89.6	50.0	39.6	71.0
1985/86.....	18.6	81.0	-	99.6	74.1	25.5	90.3
1986/87.....	9.3	100.7	-	110.0	85.7	24.3	98.0
1987/88.....	12.0	105.8	-	117.8	61.4	56.2	78.9
1988/89.....	38.7	110.3	-	149.0	73.3	75.7	P
Strawberries							
1980/81.....	103.3	253.1	76.0	432.4	325.1	107.3	327.1
1981/82.....	105.3	210.6	43.5	359.4	289.6	69.8	289.6
1982/83.....	69.8	272.7	35.5	378.0	286.6	91.4	291.1
1983/84.....	86.9	292.6	44.6	424.1	286.5	137.6	290.9
1984/85.....	133.2	231.4	61.4	426.0	306.5	119.5	313.6
1985/86.....	112.4	229.1	53.6	395.1	284.9	110.2	290.9
1986/87.....	104.2	237.6	79.9	421.7	321.2	100.5	290.7
1987/88.....	141.0	334.4	53.8	529.2	367.3	161.9	364.1
1988/89.....	165.1	274.6	P	P	P	152.0	P

See footnote on following page.

FROZEN FRUIT AND BERRY—SUPPLY—STOCKS—MOVEMENT—*Continued*

MILLION POUNDS

Items and season	Carryin	Pack	Imports	Total supply	Disappear- ance to Mar. 31	Stocks Mar. 31	Total season disappear- ance
Blackberries							
1980/81.....	6.1	20.9	-	27.0	7.7	19.3	11.3
1981/82.....	15.7	17.0	-	32.7	15.5	17.2	20.2
1982/83.....	12.5	16.3	-	28.8	18.3	10.5	20.7
1983/84.....	8.1	14.6	-	22.7	15.6	7.1	18.1
1984/85.....	4.6	11.1	-	15.7	7.3	8.4	10.7
1985/86.....	5.0	12.7	-	17.7	8.4	9.3	11.1
1986/87.....	6.6	13.0	-	19.6	7.2	12.4	9.6
1987/88.....	10.0	21.0	-	31.0	15.0	16.0	20.8
1988/89.....	10.2	21.4	-	31.6	15.4	16.2	P
Blueberries							
1980/81.....	18.0	36.4	5.7	58.1	40.3	17.8	50.1
1981/82.....	8.0	50.1	4.2	62.3	47.6	14.7	56.4
1982/83.....	5.9	46.5	6.0	58.4	39.1	19.3	49.1
1983/84.....	9.3	43.5	11.2	64.0	21.0	43.0	30.2
1984/85.....	33.8	54.8	11.1	99.7	64.6	35.1	79.6
1985/86.....	20.1	54.5	10.9	85.5	47.6	37.9	65.1
1986/87.....	20.4	77.8	10.2	108.4	75.9	32.5	90.4
1987/88.....	18.0	69.2	14.7	101.9	70.1	31.8	86.1
1988/89.....	15.8	82.4	P	P	P	45.7	P
Raspberries							
1980/81.....	5.8	21.4	-	27.0	17.6	9.4	22.3
1981/82.....	4.7	26.2	-	30.9	22.1	8.8	26.0
1982/83.....	4.9	26.7	1.2	32.8	16.6	16.2	14.0
1983/84.....	18.8	19.9	4.2	42.9	29.3	13.6	32.9
1984/85.....	10.0	19.6	3.3	32.9	14.3	18.6	22.2
1985/86.....	10.7	14.8	9.5	35.0	19.2	15.8	22.6
1986/87.....	12.4	15.3	12.6	40.3	23.8	16.5	12.7
1987/88.....	27.6	26.5	3.1	57.2	30.6	26.6	39.8
1988/89.....	17.4	26.5	P	P	P	24.6	P
Total							
1980/81.....	220.9	607.4	81.7	910.0	579.4	325.2	674.9
1981/82.....	235.1	583.0	47.7	865.8	595.6	270.2	685.2
1982/83.....	180.6	712.5	42.6	935.8	646.4	289.2	728.1
1983/84.....	190.8	534.1	60.0	784.9	460.4	324.5	548.5
1984/85.....	236.4	500.8	75.8	813.0	510.9	302.1	112.7
1985/86.....	210.1	489.0	74.0	773.1	484.3	288.8	522.7
1986/87.....	207.7	584.2	102.7	894.6	653.5	271.1	637.4
1987/88.....	251.2	722.6	71.6	1,051.4	657.5	393.9	756.5
1988/89.....	294.9	665.5	P	P	P	418.3	P

¹Season beginning May 1 for strawberries, June 1 for apricots, October 1 for apples and July 1 for all other items. *Excludes tart varieties beginning 1983/84. P - Not available at press time.

1987 CENSUS OF MANUFACTURERS - PRELIMINARY - Continued from Appendix Page 646

Table 1. HISTORICAL STATISTICS FOR THE INDUSTRY: 1987 AND EARLIER YEARS

Explanation of Census, Industries and terms begin at appendix page 646

Year ¹	All establishments ²			All employees			Value added by manufacture ⁴ (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	Ratios	
	Companies ² (no.)	Total (no.)	With 20 employees or more (no.)	Number (1,000)	Number (1,000)	Hours (millions)				Specialization (percent)	Coverage (percent)
INDUSTRY 2032, CANNED SPECIALTIES ⁵											
1987 Census	177	206	86	24.5	19.5	38.3	2 661.9	5 364.5	148.7	78	92
1986 ASM	(NA)	(NA)	(NA)	24.7	19.6	38.6	2 326.3	4 957.6	178.8	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	24.2	19.7	37.0	2 161.2	4 801.7	113.6	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	24.1	19.6	37.9	2 158.9	4 784.0	101.4	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	24.8	20.3	40.0	1 958.4	4 370.1	79.1	(NA)	(NA)
1982 Census	171	198	86	23.4	19.0	37.0	1 769.3	4 140.8	154.3	78	90
1981 ASM	(NA)	(NA)	(NA)	24.1	19.7	38.4	1 538.4	3 851.4	68.4	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	25.0	20.3	40.8	1 414.1	3 573.6	69.5	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	26.3	21.5	42.8	1 308.9	3 361.0	73.1	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	26.6	21.6	44.4	1 243.0	3 162.9	59.2	(NA)	(NA)
1977 Census	172	203	88	26.4	21.5	42.4	1 142.6	2 829.2	46.7	80	89
INDUSTRY 2033, CANNED FRUITS AND VEGETABLES ⁵											
1987 Census	463	638	417	65.4	55.8	104.2	5 434.0	11 868.0	259.8	90	84
1986 ASM	(NA)	(NA)	(NA)	67.4	57.4	102.0	5 184.8	11 170.7	240.0	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	67.6	57.3	105.4	4 448.3	10 998.7	264.1	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	69.0	58.5	109.3	4 129.6	10 389.6	242.4	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	65.2	55.6	103.9	3 660.8	9 358.1	267.7	(NA)	(NA)
1982 Census	514	715	451	70.5	60.7	113.6	3 552.7	9 263.4	264.1	89	87
1981 ASM	(NA)	(NA)	(NA)	78.2	68.2	126.7	3 253.2	9 033.4	269.8	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	79.8	68.3	129.0	2 745.0	8 413.4	243.6	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	82.4	71.4	135.9	2 813.6	8 128.3	200.4	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	82.7	73.1	132.7	2 816.9	7 236.9	208.9	(NA)	(NA)
1977 Census	648	900	519	82.6	72.6	135.0	2 546.1	6 666.5	147.1	90	89
INDUSTRY 2034, DEHYDRATED FRUITS, VEGETABLES, AND SOUPS											
1987 Census	104	127	68	10.1	8.4	15.4	938.2	1 829.6	48.2	93	81
1986 ASM	(NA)	(NA)	(NA)	12.2	9.9	17.4	859.7	1 816.9	47.1	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	13.2	11.0	20.2	839.9	1 788.0	46.1	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	11.9	9.7	17.8	885.6	1 664.4	45.9	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	11.0	8.8	17.3	897.0	1 646.9	44.0	(NA)	(NA)
1982 Census	119	151	85	13.6	11.2	19.1	792.3	1 745.1	51.7	94	83
1981 ASM	(NA)	(NA)	(NA)	12.3	9.8	17.9	987.4	1 591.7	54.7	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	13.5	10.8	20.5	701.4	1 518.3	46.6	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	14.0	11.6	21.1	596.2	1 311.5	44.8	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	14.4	11.8	22.0	519.4	1 278.9	54.2	(NA)	(NA)
1977 Census	143	184	87	14.4	11.7	22.1	485.9	1 142.4	52.5	94	88
INDUSTRY 2035, PICKLES, SAUCES, AND SALAD DRESSINGS ⁶											
1987 Census	341	376	162	21.0	16.3	32.0	2 461.7	4 918.3	220.0	79	84
1986 ASM	(NA)	(NA)	(NA)	23.1	18.1	34.5	2 473.2	5 353.2	147.0	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	22.9	18.1	34.2	2 115.6	5 123.2	129.5	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	22.6	17.9	34.3	1 894.2	4 896.3	96.4	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	22.2	17.3	33.3	2 039.6	4 698.4	61.8	(NA)	(NA)
1982 Census	325	376	155	22.0	17.4	33.3	1 736.9	4 268.6	87.5	68	83
1981 ASM	(NA)	(NA)	(NA)	23.5	19.4	37.2	1 437.9	3 889.9	63.2	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	24.8	20.7	38.8	1 384.9	3 906.2	68.7	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	25.1	20.8	39.3	1 302.9	3 630.9	73.6	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	25.6	20.6	39.1	1 243.1	3 342.2	47.5	(NA)	(NA)
1977 Census	380	438	168	23.5	18.9	35.7	986.5	2 996.5	52.3	69	86
INDUSTRY 2037, FROZEN FRUITS AND VEGETABLES ⁶											
1987 Census	196	254	193	49.7	42.7	78.3	2 982.9	6 599.5	178.1	91	93
1986 ASM	(NA)	(NA)	(NA)	46.4	40.1	70.7	2 848.6	5 885.7	196.4	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	46.1	40.2	73.3	2 355.1	5 802.5	213.5	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	46.9	41.2	76.4	2 555.7	5 968.9	189.8	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	47.5	40.9	74.4	2 393.4	5 580.8	178.3	(NA)	(NA)
1982 Census	195	264	190	47.7	41.5	77.1	2 408.6	5 374.8	235.7	93	93
1981 ASM	(NA)	(NA)	(NA)	48.8	42.7	84.6	1 989.9	4 780.2	132.3	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	48.0	41.2	82.0	1 689.2	4 180.9	145.8	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	51.9	45.7	83.5	1 531.6	3 959.1	119.2	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	48.4	41.2	81.4	1 519.0	3 861.4	130.5	(NA)	(NA)
1977 Census	187	260	193	46.8	41.5	78.5	1 322.5	3 297.5	87.7	89	89
INDUSTRY 2038, FROZEN SPECIALTIES, N.E.C. ^{6 7}											
1987 Census	242	278	178	37.1	29.8	58.0	2 770.7	5 544.9	182.6	93	94

1987 CENSUS OF MANUFACTURERS - PRELIMINARY- Continued

¹In annual survey of manufactures (ASM) years, data are estimates based on a representative sample of establishments canvassed annually and may differ from results of a complete canvass of all establishments.

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during year.

⁴Beginning with the 1982 Census of Manufactures, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior Censuses and annual surveys of manufactures in which respondents were permitted to value their inventories using any generally accepted accounting method. Consequently,

inventories and value added by manufacture are not comparable to prior-year data.

⁵Data in value of shipments column represent value of production rather than value of shipments. Consequently, formula for computing value added by manufacture was modified to exclude any change between finished products beginning and end-of-year inventories.

⁶Estimates for new capital expenditures have associated standard error of 15 percent or more and may be of limited reliability. Estimates for other data items are of acceptable reliability.

⁷Industry definition is new for 1987 Census of Manufactures. An explanation of the Standard Industrial Classification revision will appear in the final industry series text that supercedes this report.

Table 2. PRODUCT & PRODUCT CLASSES

QUANTITY & VALUE OF PRODUCTION BY ALL PRODUCERS: 1987 and 1982

Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary).

Product	1987			1982		
	Number of companies with production of \$100,000 or more	Total production ¹		Total production ¹		Value (million dollars)
		Quantity ²	Value (million dollars)	Quantity ²	Value (million dollars)	
2032- CANNED SPECIALTIES	(NA)	(X)	4 458.8	(X)	3 484.8	
Canned baby foods, except cereal and biscuits	(NA)	(X)	666.7	(X)	506.4	
Fruits	2	(D)	(D)	(D)	(D)	
Meats	2	(D)	(D)	(D)	(D)	
Vegetables	2	(D)	(D)	150.1	66.5	
Desserts (excluding 100 percent fruit products)	2	(D)	(D)	151.4	65.6	
Juices	6	(X)	(D)	(X)	115.8	
Other canned baby foods, except cereal and biscuits, but including vegetable and vegetable-meat soups, etc.	4	128.1	116.5	225.6	102.8	
Canned baby foods, n.s.k.	(NA)	(X)	-	(X)	-	
Canned soups, except frozen or seafood:	18	(X)	(³)	(³)	(³)	
Canned dry beans	(NA)	(X)	895.3	(X)	735.3	
Beans with pork, including baked:						
7.1 oz to 13 oz (8 oz short, 8 oz tall, No. 1 picnic, etc.)	48	8	7 586.2	1 700.0	21.1	
13.1 oz to 18 oz (No. 300, No. 303, etc.)	24	21	20 106.6	25 800.0	196.2	
18.1 oz to 22 oz (No. 2, etc.)	7	3	1 949.5	3 000.0	32.3	
22.1 oz to 27 oz (jumbo, etc.)	3	4	401.3	200.0	2.3	
27.1 oz to 40 oz (No. 2-1/2 quart glass, etc.)	16	3	953.9	3 700.0	54.4	
Other sizes	14	(X)	65.7	(X)	77.1	
Beans with sauce, vegetarian style, including baked:						
13.1 oz to 18 oz (No. 300, No. 303, etc.)	24	14	3 963.8	3 800.0	31.4	
Other sizes	17	(X)	45.1	(X)	39.2	
Beans, all other dry varieties, including chili con carne containing less than 20 percent meat:						
13.1 oz to 18 oz (No. 300, No. 303, etc.)	24	25	22 199.7	19 300.6	180.8	
Other sizes	22	(X)	129.1	(X)	115.5	
Canned dry beans, n.s.k.	(NA)	(X)	3.9	(X)	6.0	
Other canned specialties and canned nationality foods	(NA)	(X)	2 740.5	(X)	2 035.0	
Spaghetti with meat	7	(X)	(D)	(X)	(D)	
Spaghetti without meat	9	(X)	(D)	(X)	67.4	
Chinese foods (bean sprouts, chop suey, etc.)	5	(X)	(D)	(X)	(D)	
Mincemeat	5	8.0	8.5	7.4	8.5	
Spanish foods (Mexican rice, tortillas, enchiladas, etc.)	13	(X)	105.4	(X)	114.4	
Ravioli	5	(X)	90.0	(X)	112.1	
Macaroni with or without meat	7	(X)	(D)	(X)	(D)	
Canned gravy	4	(X)	(D)			
Other canned specialties, including canned puddings (other than canned meats)	29	(X)	309.8	(X)	326.0	
Other canned specialties and nationality foods, n.s.k.	(NA)	(X)	2.4	(X)	7.8	
Canned specialties, n.s.k.	(NA)	(X)	158.0	(X)	117.9	
Canned specialties, n.s.k., typically for establishments with 20 employees or more (see note)	(NA)	(X)	89.7	(X)	69.6	
Canned specialties, n.s.k., typically for establishments with less than 20 employees (see note)	(NA)	(X)	68.3	(X)	48.3	

1987 CENSUS OF MANUFACTURERS - PRELIMINARY- Continued

Table 2. PRODUCT & PRODUCT CLASSES - Continued

Product	Number of companies with production of \$100,000 or more	1987		1982	
		Total production ¹		Total production ¹	
		Quantity ²	Value (million dollars)	Quantity ²	Value (million dollars)
2033- CANNED FRUITS AND VEGETABLES					
Total	(NA)	(X)	12 219.0	(X)	9 255.3
Canned fruits (except baby foods)	(NA)	(X)	2 084.5	(X)	1 590.6
Apples	1,000 cases (basis 24/ 2 1/2 s.)	14	3 825.0	40.3	40.6
Applesauce	do..	18	19 751.1	236.8	209.5
Apricots	do..	5	1 321.4	26.3	37.7
Berries, except cranberries	do..	5	(D)	(D)	(D)
Cherries, red pitted	do..	9	562.7	10.1	21.1
Cherries, sweet	do..	12	2 748.0	28.1	15.8
Cranberries and cranberry sauce	do..	4	10 037.6	106.5	57.0
Grapefruit segments	do..	3	(D)	(D)	(D)
Fruit cocktail	do..	7	15 486.2	277.6	204.7
Fruits for salads, including mixed fruits other than fruit cocktail	do..	8	3 682.7	79.7	26.9
Olives, ripe and green ripe, including stuffed (drained net weight)	do..	10	11 326.0	280.2	189.6
Peaches, including spiced	do..	12	23 413.9	368.5	274.8
Pears, including spiced	do..	8	11 756.0	185.1	134.1
Pineapple (all styles)	do..	6	(D)	(D)	125.9
Canned fruit pie mixes:					
Apple	1,000 cases (basis 24/ 2 1/2 s.)	11	1 344.8	28.4	34.9
Cherry	do..	9	2 731.2	62.4	81.0
Peach	do..	6	2 197.7	6.0	10.0
Other fruit pie mixes	do..	13	1 480.5	40.2	51.8
Other canned fruit	do..	22	2 296.5	45.5	26.1
Canned fruits (except baby foods), n.s.k.	(NA)	(X)	15.1	(X)	13.0
Canned vegetables (except hominy and mushrooms)	(NA)	(X)	2 289.6	(X)	2 047.2
Beans, green lima	1,000 cases (basis 24/ 303 s.)	8	3 613.7	28.9	18.3
Beans, green and wax (including blue lake)	do..	28	49 697.9	358.2	344.3
Carrots	do..	14	4 652.5	35.0	36.1
Vegetable combinations (mixed vegetables, succotash, carrots and peas, vegetable salad, etc.)	do..	18	9 709.1	85.1	77.2
Green peas	do..	20	26 807.9	238.5	167.4
Other peas (blackeye, crowder, purple hull, field, etc.)	do..	4	1 576.6	14.0	12.6
Pumpkin and squash, including pie mix	do..	8	2 535.2	36.1	32.2
Spinach	do..	7	5 182.4	43.5	46.2
Other leafy greens (turnip, kale, mustard, etc.)	do..	3	(D)	(D)	(D)
Pimientos	do..	3	(D)	(D)	(D)
Sweet potatoes, including pie mix	do..	11	6 353.9	65.5	70.1
White potatoes	do..	16	6 141.8	48.5	52.8
Sauerkraut	do..	10	6 552.7	50.3	36.0
Asparagus	do..	13	3 983.2	80.2	46.2
Beets	do..	11	10 050.3	71.8	69.2
Sweet corn, whole kernel	do..	21	56 287.4	437.5	372.2
Sweet corn, cream style	do..	16	12 744.0	101.2	96.3
Tomatoes, including stewed	do..	35	45 451.2	429.1	356.3
Other canned vegetables	do..	25	5 782.5	104.5	123.7
Canned vegetables (except hominy and mushrooms), n.s.k.	(NA)	(X)	32.2	(X)	22.2
Canned hominy and mushrooms	(NA)	(X)	165.5	(X)	139.0
Hominy	1,000 cases (basis 24/ 303 s.)	9	4 811.9	50.9	10.3
Mushrooms	do..	12	4 273.0	114.3	128.3
Canned hominy and mushrooms, n.s.k.	(NA)	(X)	.4	(X)	.5
Canned vegetable juices	(NA)	(X)	310.3	(X)	270.3
Tomato juice, including combinations containing 70 percent tomato juice or more	mil gal.	25	326.6	296.5	265.8
Other vegetable juices	do..	6	2.0	7.4	3.8
Canned vegetable juices, n.s.k.	(NA)	(X)	6.5	(X)	.7

See footnotes at end of table.

1987 CENSUS OF MANUFACTURERS - PRELIMINARY- Continued

Table 2. PRODUCT & PRODUCT CLASSES - Continued

Product	Number of companies with production of \$100,000 or more	1987		1982	
		Total production ¹		Total production ¹	
		Quantity ²	Value (million dollars)	Quantity ²	Value (million dollars)
2033- CANNED FRUITS AND VEGETABLES—Con.					
Catsup and other tomato sauces, pastes, etc.	(NA)	(X)	3 022.7	(X)	2 174.4
Tomato sauces, except catsup, chili, barbecue sauce, and spaghetti sauce (excluding pulp, puree, or paste): 7.1 oz to 10 oz (8 oz tall, etc.)	1,000 cases/ 72..	13	13 332.4	215.1	14 970.9
Other sizes	1,000 cases (basis 12/ 12 glass)...	27	61 707.3	319.0	(NA)
Catsup: 14 oz to 32 oz	1,000 cases/ 24..	13	21 778.8	333.5	35 268.0
All other sizes, including individual serving sizes	1,000 cases (basis 12/ 12 glass)...	30	53 335.3	552.4	(NA)
Spaghetti, pizza, and marinara sauces, with or without other added ingredients, including those with less than 20 percent meat	do..	35	82 711.0	552.9	(¹)
Chili sauce	do..	22	12 736.3	88.6	(NA)
Barbecue sauce	do..	25	24 229.4	270.4	(NA)
Tomato paste: 4.1 oz to 7 oz (6 oz, etc.)	1,000 cases/ 48..	5	(D)	(D)	7 423.1
100.1 oz to 115 oz (No. 10)	1,000 cases/ 6..	8	(D)	(D)	1 774.9
All other sizes, including bulk (24 percent NTSS equivalent)	mil lb..	18	1 288.4	411.8	*914.3
Tomato pulp and puree	1,000 cases (basis 24/ 303 s)...	20	15 166.6	113.3	(NA)
Catsup and other tomato sauces, pastes, etc., n.s.k.	(NA)	(X)	18.5	(X)	14.1
Jams, jellies, and preserves	(NA)	(X)	684.1	(X)	603.0
Jams and preserves, pure: Strawberry	mil lb..	23	223.5	156.1	(NA)
Other	do..	27	228.9	156.2	(NA)
Jellies, pure: Grape	mil lb..	20	180.3	119.7	(NA)
Other	do..	24	95.5	60.3	(NA)
Imitation jellies, jams, and preserves	do..	8	55.1	48.2	(D)
Marmalades	do..	8	18.9	15.1	(NA)
Fruit butter	do..	8	27.4	34.7	(NA)
Marschino cherries, excluding glace and candied	mil gal..	8	10.7	64.6	(S)
Jams, jellies, and preserves, n.s.k.	(NA)	(X)	11.1	(X)	10.8
Canned fruit juices, nectars, and concentrates	(NA)	(X)	2 342.9	(X)	1 409.9
Juices and nectars, single strength: Apple	mil gal..	35	173.8	355.0	(NA)
Orange	do..	32	1 275.0	1 196.6	(NA)
Grapefruit	do..	26	67.1	224.7	(NA)
Prune	do..	9	6.8	24.5	(NA)
Other whole fruit juices and mixtures of whole fruit juices	do..	41	118.0	337.7	(NA)
Nectars	do..	5	3.4	10.0	(NA)
Fruit juices, concentrated, hot pack	mil gal angl st equiv..	15	38.3	177.1	9.9
Canned fruit juices, nectars, and concentrates, n.s.k.	(NA)	(X)	17.3	(X)	30.0
Fresh fruit juices and nectars, single strength	mil gal..	(NA)	(X)	942.4	(NA)
Juices and nectars, single strength: Orange	mil gal..	124	271.6	480.2	(NA)
Other	do..	86	123.2	377.8	
Concentrated fruit juice, except for fountain use	mil gal angl st equiv..	19	29.3	84.5	
Fresh fruit juices and nectars, single strength, n.s.k.	(NA)	(X)	-	-	652.2
Canned fruits and vegetables, n.s.k.	(NA)	(X)	398.8	(X)	368.7
Canned fruits and vegetables, preserves, jams, jellies, and juices, n.s.k., typically for establishments with 20 employees or more (see note)	(NA)	(X)	266.6	(X)	262.7
Canned fruits and vegetables, preserves, jams, jellies, and juices, n.s.k., typically for establishments with less than 20 employees (see note)	(NA)	(X)	942.4	(NA)	108.0

See footnotes at end of table.

1987 CENSUS OF MANUFACTURERS - PRELIMINARY- Continued

Table 2. PRODUCT & PRODUCT CLASSES - Continued

Product	Number of companies with shipments of \$100,000 or more	1987		1982	
		Product shipments ¹		Product shipments ¹	
		Quantity ²	Value (million dollars)	Quantity ²	Value (million dollars)
2034- DEHYDRATED FRUITS, VEGETABLES, AND SOUPS					
Total	(NA)	(X)	2 050.2	(X)	1 672.0
Soup mixes, dried:					
Soup mixes (including oriental), dried and dehydrated, and freeze-dried	mil lb.. 16	210.0	451.4	(S)	332.8
Dried and dehydrated fruits and vegetables (including freeze-dried) except soup mixes	(NA)	(X)	1 498.9	(X)	FF1 247.3
Fruits, dried and dehydrated:					
Raisins	mil lb.. 10	349.9	333.7	335.1	342.9
Prunes	do.. 9	313.4	265.2	253.0	178.6
Dates	do.. 3	5.1	7.4	7.3	14.7
Apples	do.. 7	43.6	56.9	25.3	27.4
Other dried and dehydrated fruits and fruit peels, including fruit flour, meal, and powder	do.. 20	124.1	195.6	42.5	62.1
Dried and dehydrated potatoes (except potato flour), not packaged with other ingredients:					
Consumer sizes (1 lb or less)	mil lb.. 6	(D)	(D)	(D)	(D)
Commercial sizes (more than 1 lb)	do.. 6	(D)	(D)	(D)	(D)
Vegetables, dried and dehydrated (except potatoes):					
Onions	mil lb.. 5	134.0	133.8	160.5	177.6
Vegetable flour, including potato flour	do.. 2	1.2	3.5	-	-
Other dried and dehydrated vegetables	do.. 8	128.5	330.0	112.2	162.0
Dried and dehydrated fruits and vegetables (including freeze-dried) except soup mixes, n.s.k.	(NA)	(X)	-	(X)	14.5
Dehydrated fruits, vegetables, and soups, n.s.k.	(NA)	(X)	99.9	(X)	91.8
Dehydrated fruits, vegetables, and soups, n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	(X)	38.2	(X)	64.6
Dehydrated fruits, vegetables, and soups, n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	(X)	61.7	(X)	27.2
2035- PICKLES, SAUCES, AND SALAD DRESSINGS					
Total	(NA)	(X)	4 488.4	(X)	3 252.7
Pickles and other pickled products	(NA)	(X)	1 000.2	(X)	894.5
Finished pickles and other pickled products:					
Cucumber:					
Dill	mil gal.. 26	93.4	392.8	85.8	285.2
Sour	do.. 10	12.2	45.2	*6.5	26.8
Sweet	do.. 17	110.3	164.4	*27.4	108.7
Refrigerated pickles, including overnight, half sour, artificially acidified, etc.	do.. 15	27.7	87.8	20.3	69.7
Horseradish (excluding sauce)	do.. 6	2.0	12.7		
Other finished pickles and pickled products (including mixes, relishes, peppers, onions, mushrooms, etc.)	do.. 41	42.9	216.0	*34.7	131.1
Unfinished pickled products:					
Unfinished pickles (salt stock)	mil gal.. 9	11.9	12.8	21.0	22.8
Brined cherries	do.. 6	3.2	21.6	(S)	18.4
Other bulk pickled products, such as mushrooms, sauerkraut, etc.	do.. 12	14.1	35.6	*5.6	17.9
Pickles and other pickled products, n.s.k.	(NA)	(X)	11.4	(X)	13.9
Prepared sauces (except tomato)	(NA)	(X)	901.6	(X)	540.0
Prepared mustard	mil gal.. 44	77.9	256.3	*50.6	138.7
Other sauces (worcestershire, soy, horseradish, meat, vegetable, seafood, etc.)	do.. 87	124.4	639.6	**99.9	401.0
Prepared sauces (except tomato), n.s.k.	(NA)	(X)	5.8	(X)	.3
Mayonnaise, salad dressings, and sandwich spreads	(NA)	(X)	2 284.6	(X)	1 815.4
Spoon type dressing:					
Salad dressing	mil gal.. 48	107.8	590.2	91.4	525.9
Mayonnaise	do.. 40	117.1	508.1	177.2	667.3
Other spoon type dressing, including sandwich spreads, refrigerated dressings, and all other semisolid type dressing	do.. 34	122.8	683.7	*28.0	126.3
Pourable dressing (including reduced calorie, cheese, vinegar and oil, etc.)	do.. 39	56.6	493.1	86.9	484.8
Mayonnaise, salad dressings, and sandwich spreads, n.s.k.	(NA)	(X)	9.5	(X)	11.2
Pickles, sauces, and salad dressings, n.s.k.	(NA)	(X)	302.0	(X)	202.7
Pickles, sauces, and salad dressings, n.s.k., typically for establishments with 10 employees or more (see note)	(NA)	(X)	131.6	(X)	119.5
Pickles, sauces, and salad dressings, n.s.k., typically for establishments with less than 10 employees (see note)	(NA)	(X)	170.3	(X)	83.2

1987 CENSUS OF MANUFACTURERS - PRELIMINARY- Continued

Table 2. PRODUCT & PRODUCT CLASSES - Continued

Product	Number of companies with production of \$100,000 or more	1987		1982	
		Total production ¹		Total production ¹	
		Quantity ²	Value (million dollars)	Quantity ²	Value (million dollars)
2037- FROZEN FRUITS AND VEGETABLES					
Total	(NA)	(X)	6 233.9	(X)	5 062.0
Frozen fruits, juices, ades, drinks, and cocktails	(NA)	(X)	2 485.5	(X)	1 860.4
Frozen fruits:					
Strawberries	mil lb.. 19	228.5	126.0	313.8	94.9
Red sour cherries	do.. 12	86.9	42.9	46.7	23.5
Apples and applesauce	do.. 9	96.5	53.7	*117.8	35.2
Berries, including blueberries, raspberries, blackberries, etc.	do.. 15	64.9	60.0	59.2	45.4
Other frozen fruits	do.. 23	189.4	113.0	167.5	90.3
Frozen fruit and berry juices, concentrated:					
Orange juice:					
Consumer and institutional sizes:					
6 oz or less	1,000 cases/ 48.. 17	11 966.3	182.2	9 400.0	123.8
6.1 oz to 12 oz	1,000 cases/ 24.. 11	21 287.5	430.6	22 200.0	332.7
12.1 oz to 24 oz	do.. 10	8 032.2	164.1	6 500.0	137.0
24.1 oz or more	1,000 cases.. 12	6 733.5	167.5	5 100.0	109.6
Bulk	mil lb solid.. 20	362.5	503.8	254.9	348.1
Grape juice:					
4.1 oz to 7 oz	1,000 cases/ 48.. 8	1 832.4	18.4	600.0	6.4
10.1 oz to 13 oz	1,000 cases/ 24.. 7	2 499.0	32.1	2 500.0	39.3
Other sizes	mil lb solid.. 5	11.1	11.1	(D)	(D)
Grapefruit juice	do.. 22	68.6	120.1	52.3	55.6
Other frozen fruit and berry juice, concentrated	do.. 20	174.4	255.1	146.0	206.5
Frozen fruit ades, drinks, and cocktails, concentrated:					
Lemonade:					
4.1 oz to 7 oz	1,000 cases/ 48.. 5	1 641.4	14.8	1 500.0	10.3
10.1 oz to 13 oz	1,000 cases/ 24.. 7	7 878.7	51.8	3 800.0	32.7
Other sizes	mil lb solid.. 6	11.3	11.7	6	5.5
All other ades, drinks, and cocktails	do.. 10	114.8	91.2	(D)	(D)
Citrus pulp	1,000 s tons.. 16	310.3	35.2	536.5	58.0
Frozen fruits, juices, ades, drinks, and cocktails, n.s.k.	(NA)	(X)	.1	(X)	5.1
Frozen vegetables	(NA)	(X)	3 628.3	(X)	3 089.7
Asparagus	mil lb.. 6	21.1	30.7	15.3	26.6
Beans; green, regular, and french cut	do.. 17	261.9	111.1	296.2	127.0
Lima beans; baby, emerald, and fordhook	do.. 19	110.4	52.6	**124.5	63.3
Broccoli	do.. 18	330.0	174.6	*358.9	193.8
Brussels sprouts	do.. 9	52.8	30.2	58.5	36.5
Carrots	do.. 25	272.0	78.0	186.6	48.9
Cauliflower	do.. 20	126.7	73.4	103.2	67.2
Green peas	do.. 28	375.2	153.5	390.6	180.0
Spinach	do.. 18	175.3	64.8	173.1	55.7
Vegetable combinations (succotash, peas and carrots, mixed vegetables, vegetables with pasta, etc.)	do.. 24	612.8	277.5	283.7	168.1
French-fried potatoes	do.. 15	4 735.1	1 485.6	3 676.4	1 167.8
Other potato products (patties, puffs, etc.)	do.. 20	905.1	367.8	717.8	288.8
Sweet cut corn, yellow	do.. 24	457.7	192.2	474.4	199.3
Sweet cob corn, yellow	do.. 12	249.6	106.3	317.3	117.6
Southern greens; collards, kale, mustard, and turnip	do.. 6	76.8	26.4	111.2	35.5
Other frozen vegetables	do.. 43	685.7	393.9	*604.2	327.3
Frozen vegetables, n.s.k.	(NA)	(X)	9.7	(X)	6.4
Frozen fruits and vegetables, n.s.k.	(NA)	(X)	120.1	(X)	111.9
Frozen fruits and vegetables, n.s.k., typically for establishments with 20 employees or more (see note)	(NA)	(X)	76.8	(X)	87.5
Frozen fruits and vegetables, n.s.k., typically for establishments with less than 20 employees (see note)	(NA)	(X)	43.3	(X)	24.4

See footnotes at end of table.

1987 CENSUS OF MANUFACTURERS - PRELIMINARY- Continued

Table 2. PRODUCT & PRODUCT CLASSES - Continued

Product	Number of companies with production of \$100,000 or more	1987		1982	
		Total production ¹		Total production ¹	
		Quantity ²	Value (million dollars)	Quantity ²	Value (million dollars)
2038- FROZEN SPECIALTIES, N.E.C.					
Total	(NA)	(X)	5 178.1	(X)	3 134.7
Frozen dinners; beef, pork, and poultry pies; and nationality foods	(NA)	(X)	4 029.5	(X)	2 356.6
Frozen dinners	20	784.6	960.5	572.1	475.9
Frozen entrees and side dishes (including macaroni and macaroni-type products, but excluding rice dishes and nationality foods)	44	818.1	922.4	(S)	684.5
Frozen rice dishes	2	(D)	(D)		
Frozen beef and pork pies	11	68.3	56.7	79.4	41.7
Frozen poultry pies	10	*161.6	*127.6	241.1	119.4
Frozen nationality foods:					
Pizza	37	829.3	1 215.0	714.7	725.5
Chinese	10	49.7	64.1	24.0	26.9
Mexican	24	283.4	315.8	275.5	180.4
Italian, excluding pizza	25	217.2	286.8	80.6	64.0
All other frozen nationality foods	14	67.9	50.1	**29.0	26.4
Frozen dinners, beef, pork, poultry pies, and nationality foods, n.s.k.	(NA)	(X)	10.4	(X)	11.8
Other frozen specialties, n.e.c.	(NA)	(X)	978.6	(X)	624.3
Whipped topping (dairy product substitute, dairy or nondairy base)	7	456.0	270.3	226.4	190.6
Other frozen dairy product substitutes, except meringue and similar products	4	(X)	7.1	(X)	77.5
Frozen waffles, pancakes, and french toast	8	177.9	170.3	(¹)	(¹)
Other frozen specialties, except seafood, including soups, etc.	42	496.3	530.9	*562.8	355.8
Other frozen specialties, n.s.k.	(NA)	(X)	-	(X)	.4
Frozen specialties, n.e.c., n.s.k.	(NA)	(X)	168.0	(X)	143.8
Frozen specialties n.e.c., n.s.k., typically for establishments with 20 employees or more (see note)	(NA)	(X)	110.6	(X)	79.9
Frozen specialties n.e.c., n.s.k., typically for establishments with less than 20 employees (see note)	(NA)	(X)	57.4	(X)	63.9

ABBREVIATIONS AND SYMBOLS

- Represents zero.
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (NC) Not comparable.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate or a consistency review.
- (X) Not applicable.
- (Z) Less than half the unit shown.
- do Ditto.
- n.e.c. Not elsewhere classified.
- n.s.k. Not specified by kind.
- pt. Part.
- r Revised.
- SIC Standard Industrial Classification.

Note: In 1987 Census of Manufacturers, data for establishments of small single unit companies with up to 20 employees were estimated from administrative-record data rather than data actually collected from respondents.

¹Data reported by all producers, not just those with shipments of \$100,000 or more.

²For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: *10 to 19 percent estimated; **20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

³Data for canned soups (except frozen or seafood) and other canned specialties and canned nationality foods were combined to avoid disclosure of figures for individual companies.

⁴For 1982, "Cases" were not defined as to size or number per case. Therefore, 1982 Quantities are not comparable to those collected for 1987.

⁵For 1987, data for frozen rice dishes was included with frozen poultry pies.

See More Census Data Beginning Page 646

THE ALMANAC

OF THE CANNING, FREEZING, PRESERVING INDUSTRIES

Section IX

INTERNATIONAL TRADE AND WORLD PACKS

CANNED, FROZEN AND PRESERVED FOODS

INDEX

EXPORTS, U.S.

Fruit.....	606, 610
Juices.....	605
Meats.....	606
Milk.....	607
Seafood.....	606, 607
Soups.....	606
Vegetables.....	605, 611

EXPORT MARKETS, U.S.—COUNTRY OF DESTINATION—Selected Products

Fruits, Canned.....	610
Vegetables, Canned.....	611

IMPORTS, U.S.

Fish.....	608, 609
Fruits.....	607, 613
Juices.....	608, 612
Meats.....	609
Shellfish.....	609

Surimi.....	608, 609
Vegetables.....	608, 612, 615

IMPORTS—BY IMPORTING COUNTRY WITH COUNTRY OF ORIGIN

Cherries.....	613
Fruit Mixtures.....	613
Mushrooms.....	615
Orange Conc. Frozen.....	612, 614
Peaches.....	613
Pears.....	614
Pineapple.....	614
Tomato Concentrates.....	615
Tomatoes.....	615

WORLD PACKS—Selected

Fruits, by product.....	616
Fruits, by country.....	617
Vegetables, by product.....	618
Vegetables, by country.....	619

U.S. EXPORTS CANNED AND FROZEN FOODS

Source: Bureau of the Census, U.S. Department of Commerce

Courtesy & Cooperation. National Food Processors Assn. and Foreign Agriculture Service, U.S.D.A.

	1984		1985		1986		1987		1988	
	1,000 Gallons	Value \$1,000	1,000 Gallons	Value \$1,000	1,000 Gallons	Value \$1,000	1,000 Gallons	Value \$1,000	1,000 Gallons	Value \$1,000
FRUIT JUICES										
Not Concentrated:										
Grapefruit.....	1,713	3,872	1,568	3,447	1,621	3,830	1,987	4,446	3,434	5,892
Orange.....	5,126	11,724	6,342	12,009	3,481	7,186	4,505	8,749	7,881	13,888
Other Citrus & citrus mix.....	1,647	2,671	3,589	5,115	1,258	1,959	1,371	2,036	2,167	2,996
Grape.....	2,050	1,925	1,454	1,881	2,465	2,330	1,075	1,641	903	1,933
Pineapple.....	2,629	6,194	2,141	5,819	1,916	4,570	1,284	3,083	1,589	3,496
Other.....	5,386	11,949	5,038	11,319	6,416	14,672	8,964	17,687	14,025	23,817
Total Not Conc.	18,551	38,335	20,132	39,590	17,157	34,546	19,186	37,642	29,999	52,022
Frozen Concentrate: (s.s. basis)										
Grapefruit.....	12,325	18,148	10,386	18,470	8,963	15,584	12,939	24,210	19,919	35,310
Orange, containers less than 32 oz. . .	23,518	56,246	18,977	38,460	12,569	22,266	13,562	26,528	11,626	28,117
Orange, containers 32 oz.-1 gal. . .	7,203	13,228	6,719	12,810	6,605	10,585	7,096	12,780	6,881	14,570
Orange, containers more than 1 gal. .	31,802	41,370	19,448	28,893	20,176	22,352	27,329	33,904	36,752	56,894
Other citrus.....	13,838	13,902	10,286	10,036	3,809	4,448	7,159	7,965	12,392	14,583
Grape.....	2,255	3,457	1,252	2,030	1,934	3,477	2,326	4,719	3,446	5,984
Other.....	4,811	7,378	4,824	7,425	3,302	5,795	3,989	6,789	6,061	11,835
Total Froz. Conc.	95,752	153,729	71,892	118,124	57,358	84,507	74,400	116,895	97,077	167,293
Concentrate, not frozen (hot pack): (s.s. basis)										
Grapefruit.....	1,491	2,899	1,534	2,614	2,266	4,425	1,920	3,498	1,934	3,660
Orange.....	4,556	6,616	3,427	5,559	3,585	5,012	3,611	5,033	4,385	8,028
Other citrus & citrus mix.....	1,976	1,930	2,907	3,653	2,675	2,767	1,894	2,509	2,261	4,534
Grape.....	3,868	5,666	3,925	6,661	3,492	5,987	4,940	11,073	7,071	14,224
Pineapple.....	714	653	710	915	794	1,157	538	831	339	702
Other.....	12,259	9,976	14,235	11,874	9,747	10,219	6,438	9,120	8,370	14,441
Total Conc. not frozen.....	24,864	27,740	26,738	31,276	22,558	29,567	19,341	32,064	24,360	45,589
VEGETABLE JUICES										
Tomato.....	1,490	3,479	1,274	2,598	1,581	3,051	1,411	3,363	1,989	3,892
Other veg. juices. . .	1,066	1,988	651	1,395	855	2,188	679	1,902	1,167	2,317

	1984		1985		1986		1987		1988	
	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000
CANNED VEGETABLES										
Asparagus.....	2,133	2,235	1,562	1,641	1,399	1,419	1,654	1,595	3,596	2,768
Beans, dry.....	7,096	2,441	6,553	2,110	7,059	2,143	5,743	1,684	20,366	6,533
Beans, other.....	15,914	6,915	15,238	6,700	17,226	7,675	14,335	5,617	16,601	7,517
Corn.....	126,156	47,119	134,592	46,150	168,884	55,936	200,422	66,442	254,403	89,670
Peas.....	4,232	1,464	3,176	1,148	3,451	1,060	3,471	1,013	3,017	1,012
Mushrooms.....	634	453	556	424	552	351	478	351	1,096	372
Tomatoes.....	11,951	3,346	15,939	2,999	13,907	2,555	8,040	2,125	11,842	3,224
Tomato pulp.....	757	276	1,400	489	812	291	2,506	1,052	4,752	1,742
Tomato paste.....	21,203	9,099	15,691	5,872	17,234	6,648	20,440	7,721	26,618	10,816
Tomato sauce.....	5,895	2,156	4,723	1,623	6,187	2,155	6,479	2,291	17,409	7,195
Catsup & chili sauce	20,372	8,473	18,083	6,584	18,902	7,594	23,450	8,550	26,446	9,354
Other canned vegs.	25,131	12,049	22,499	10,939	17,020	7,940	17,384	7,716	23,320	10,155
Veg. baby food... .	5,137	1,199	3,868	1,787	3,990	1,776	4,184	1,785	4,613	2,289
Total canned veg.	246,611	98,325	243,880	88,466	276,623	97,533	308,586	107,942	414,079	152,647
PICKLED VEGETABLES										
Cucumbers.....	11,073	2,909	12,632	3,197	23,482	3,768	24,674	4,073	26,916	3,971
Other pickled vegs.	1,808	816	1,646	852	1,905	1,121	1,807	910	2,048	1,220
FROZEN VEGETABLES										
Carrots.....	8,259	2,298	5,529	1,527	5,984	1,757	8,344	2,046	18,082	3,704
Corn.....	77,380	23,013	75,975	22,118	97,530	28,525	88,730	28,762	113,711	38,056
Peas.....	20,148	5,563	15,986	4,498	26,163	7,092	27,641	8,172	35,343	10,633
Potatoes, F.F.....	123,134	40,323	127,697	41,392	171,756	54,231	212,982	68,745	265,636	82,093
Potatoes, other... .	17,300	6,742	18,131	5,936	23,310	9,869	33,022	13,838	43,473	14,194
Other froz. vegs. . .	41,813	17,909	37,034	16,844	46,908	20,771	50,877	21,772	77,777	32,752
Total Froz. Veg. . .	288,034	95,848	280,352	92,315	371,652	122,244	421,596	143,335	554,022	181,432

U.S. EXPORTS CANNED AND FROZEN FOODS—Continued

	1984		1985		1986		1987		1988	
	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000
CANNED MEATS										
Poultry.....	1,147	1,936	1,259	1,721	738	1,093	493	902	908	1,528
Sausages.....	1,953	2,108	1,628	1,678	1,627	1,665	2,060	2,234	2,720	3,111
Pork (not sausage).....	1,130	1,406	1,407	1,835	768	862	829	1,047	592	902
Beef and veal.....	4,269	3,130	2,499	2,387	2,018	1,870	1,448	1,385	2,449	2,429
Other can meats.....	1,704	1,965	804	984	1,085	1,202	1,329	1,536	2,595	3,527
Total Can Meats.....	10,203	10,545	7,597	8,605	6,237	6,692	6,159	7,104	9,264	11,497
SOUPS										
Soup, dried/dehyd.....	2,412	3,419	3,545	4,132	5,808	4,102	6,305	4,881	6,516	6,929
Soup, other.....	24,305	12,013	21,644	10,908	24,862	11,725	23,039	10,395	28,258	12,308
CANNED FRUITS										
Apricots.....	876	528	860	685	710	369	1,049	616	1,986	1,127
Cherries, marasch.....	3,971	2,968	3,577	2,714	5,751	4,344	5,391	3,901	5,499	4,612
Cherries, sweet.....	3,433	2,437	3,756	2,370	4,938	3,652	8,576	5,721	9,630	6,847
Cherries, tart.....	779	568	1,110	609	660	428	3,088	1,193	1,973	900
Berries ¹	3,018	1,638	1,987	1,052	3,792	1,274	3,001	1,330	2,598	2,179
Grapefruit.....	4,036	930	684	298	4,613	1,929	3,300	1,344	2,761	1,117
Other citrus & citrus mix.....	5,358	3,416	4,247	2,643	3,346	1,902	4,345	2,671	4,891	2,715
Olives, canned.....	2,229	1,605	2,546	1,766	2,283	1,750	2,506	2,064	2,699	2,451
Olives, (pres. not can).....	1,046	713	1,007	635	943	637	1,113	897	1,066	773
Peaches.....	29,372	12,150	22,226	8,907	39,440	14,321	34,241	12,887	40,647	16,585
Pears.....	2,509	1,059	1,769	922	2,552	1,078	2,490	1,014	2,161	980
Pineapple.....	28,095	12,512	16,161	6,225	22,203	8,013	15,949	5,542	27,545	10,373
Other can fruits.....	13,979	6,904	11,111	4,499	13,026	6,723	12,163	7,158	10,144	6,158
Mix., non-citrus.....	47,679	21,276	36,808	16,734	41,322	18,912	50,110	22,632	52,299	24,204
Total Can Fruits.....	146,380	68,704	107,849	50,059	145,580	65,331	147,322	68,970	165,899	81,021
Baby food fruits.....	13,111	6,450	13,887	6,323	7,567	3,379	7,164	3,145	3,639	1,850
Other fruit pastes & pulps.....	13,311	5,521	15,161	6,060	19,064	6,618	20,352	7,045	17,217	6,926
Jam, jelly, marm. and fruit butter.....	5,138	3,851	4,770	3,711	4,598	3,389	6,027	4,422	7,228	5,725
FROZEN FRUITS										
Blueberries.....	8,983	3,422	5,071	1,786	8,167	2,448	20,077	5,689	26,196	6,906
Strawberries.....	6,239	3,371	6,632	3,222	8,462	4,978	10,821	6,080	17,819	9,475
Other froz. berries.....	6,532	3,043	5,707	2,377	7,868	3,124	15,370	5,270	7,289	4,283
Cherries, sweet.....	2,924	1,662	1,326	714	2,162	1,885	3,743	2,226	4,892	2,869
Cherries, tart.....	469	232	414	132	971	390	1,712	505	863	287
Other froz. fruits.....	5,357	2,500	6,360	2,761	6,338	2,710	13,092	4,767	8,370	4,052
Tot. Froz. Fruits.....	30,504	14,230	25,510	10,992	33,968	15,535	64,815	24,537	65,429	27,872
FRESH & FROZEN FISH FILLETS, STEAKS AND PORTIONS										
Cod.....	n.a.	n.a.	n.a.	n.a.	9,546	12,669	11,405	16,347	11,941	18,196
Salmon.....	2,808	5,572	956	2,037	3,086	6,064	1,960	4,403	1,715	4,457
Herring.....	614	537	1,880	1,722	5,455	4,045	2,751	2,512	19,391	18,393
Other.....	20,430	26,672	17,492	24,598	22,992	35,108	38,195	52,471	54,305	71,398
Steaks & portions.....	2,914	3,812	2,085	2,643	2,414	3,210	2,200	3,684	2,150	3,348
Balls, cakes, etc.....	438	466	227	298	1,080	1,513	7,043	6,727	46,749	41,223
CANNED FISH										
Salmon, chum.....	2,797	3,477	2,551	3,115	1,676	2,002	2,456	3,492	1,072	2,478
Salmon, pink.....	20,825	29,683	19,831	27,463	38,611	52,599	17,390	32,077	13,702	31,577
Salmon, sockeye.....	23,238	50,050	24,105	49,386	14,372	38,225	11,091	37,704	11,867	38,094
Salmon, other.....	2,103	3,581	1,753	3,095	4,775	8,409	4,964	12,543	6,259	19,419
Sardines.....	889	584	529	424	271	321	999	688	8,555	7,902
Other.....	6,777	7,262	3,623	4,400	5,304	6,897	5,434	6,829	6,091	8,964
Fish balls, cakes, puddings, pastes, and sauces.....	514	810	2,248	1,698	3,047	2,907	2,136	2,528	3,469	3,386
Total Can Fish.....	57,143	95,447	54,640	89,581	68,056	111,360	44,470	95,861	51,015	111,820
CANNED SHELLFISH										
Abalone.....	n.a.	n.a.	139	851	999	9,658	1,159	12,380	1,459	17,187
King crab.....	84	288	141	651	50	117	63	126	250	564
Shrimp.....	2,712	8,040	1,564	4,261	1,964	5,519	2,334	8,264	2,014	7,855
Squid.....	460	150	1,838	817	7,815	3,116	4,898	1,943	6,651	2,890
Other, inc. shellfish juices.....	611	2,186	208	312	706	2,479	699	1,678	819	1,751
Tot Can Shellfish.....	3,867	10,664	3,890	6,892	11,534	20,889	9,153	24,391	11,198	30,247

¹Includes cranberry sauce.

²Includes 7,132,291 lbs. to Canada.

U.S. EXPORTS CANNED AND FROZEN FOODS—Continued

	1984		1985		1986		1987		1988	
	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000
FRESH & FROZEN SHELLFISH¹										
Clams.....	n.a.	n.a.	1,001	1,662	1,319	2,277	1,232	1,933	1,558	2,540
Dungeness Crab...	n.a.	n.a.	n.a.	n.a.	503	2,043	691	3,133	1,052	3,576
King Crab.....	2,012	11,340	2,316	10,479	3,966	24,487	8,375	60,581	5,251	45,993
Snow Crab.....	14,614	28,561	22,271	37,164	31,420	73,571	43,339	117,530	57,466	175,117
Other Crab.....	n.a.	n.a.	3,959	9,632	5,405	15,706	3,741	11,897	5,181	17,696
Lobster.....	n.a.	n.a.	(a)	(a)	1,164	4,013	1,840	7,113	2,367	12,728
Lobster (fresh)...	n.a.	n.a.	1,501	5,296	1,437	4,977	1,944	7,278	5,691	23,542
Scallops.....	n.a.	n.a.	(a)	(a)	468	2,227	487	2,382	484	2,210
Scallops (fresh)...	n.a.	n.a.	605	2,453	348	1,419	361	1,298	185	598
Sea Urchin (fresh).	n.a.	n.a.	656	5,327	1,271	11,451	2,931	25,389	3,647	30,049
Shrimp (fresh)...	2,656	6,914	2,004	5,783	4,105	12,803	6,753	19,889	4,896	18,062
Shrimp (frozen)...	10,870	36,618	13,003	42,374	15,938	56,316	15,228	54,962	17,220	59,961
Squid.....	4,716	4,494	7,003	4,746	14,374	11,811	16,422	11,938	37,847	25,113
Other.....	(a)	(a)	(a)	(a)	3,702	8,535	9,987	17,892	6,281	15,177
Other (fresh).....	15,041	45,324	3,587	8,468	1,749	4,615	2,376	7,439	2,901	8,179
Total.....	49,909	133,251	57,906	133,384	87,169	236,251	115,707	350,654	152,027	440,561
CANNED MILK										
Evaporated.....	7,254	3,697	9,756	5,048	5,038	2,728	2,705	1,210	2,227	1,209
Condensed.....	479	243	442	192	934	259	2,069	803	333	240

¹ Frozen unless indicated as (fresh). (a) Included with fresh.

CONVERTING POUNDS TO APPROXIMATE CASES: FRUITS & VEGETABLES: To 24/303's divide by 24; to 24/2's divide by 30; to 24/2½'s divide by 45. To convert 1,000 gallons to cases of 12/46 oz. divide by 4.3125.

U.S. IMPORTS OF CANNED & FROZEN FOODS

National Marine Fisheries Service, U.S. Department of Commerce
USDA's Foreign Agricultural Service and National Food Processors Assn. Div. of Int. Trade

	1984		1985		1986		1987		1988	
	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000
FRUITS, Prep. or pres.										
Apples, Canned...	8,510	1,673	5,939	2,010	5,775	1,598	6,668	1,351	5,820	1,366
Apricots, Canned...	12,728	3,360	10,165	2,454	10,159	3,917	8,609	3,614	7,947	3,126
Blueberries, Froz...	10,693	6,130	10,216	5,876	10,113	5,647	16,192	11,243	11,219	9,951
Boysenberries, Froz.	1,142	407	3,009	1,606	4,598	2,692	3,059	1,867	1,327	610
Raspberries, Froz.	4,788	2,441	4,391	2,517	14,135	7,913	6,256	4,657	2,775	2,750
Strawbs., Frozen										
Up to 40 oz....	1,827	618	2,326	687	2,003	794	2,121	813	3,250	1,001
Over 40 oz....	49,104	16,399	57,364	15,686	48,745	16,255	72,901	25,252	61,349	16,181
Blueberries, Canned	312	217	357	276	552	429	321	317	296	343
Black Currants,										
Canned ¹	731	804	714	714	583	709	593	833	565	819
Raspberries, Can...	288	254	764	579	749	699	358	389	435	588
Strawbs., Canned...	1,120	668	4,148	1,815	1,813	1,197	4,198	2,039	3,306	2,380
Cherries, In Brine...	2,159	1,391	3,588	2,208	7,123	4,834	2,051	1,806	2,505	2,295
Cherries, Canned...	777	741	1,532	942	2,412	1,868	627	889	860	827
Cherries, Frozen...			138	45	306	110	482	158	451	143
Figs, Canned.....	452	312	289	148	77	77	484	203	215	126
Grapefruit, Canned...	14,556	4,439	20,063	6,545	32,812	9,695	29,348	10,633	25,107	9,978
Oranges, Mandarin	97,082	39,654	98,990	36,690	95,389	39,401	109,395	48,110	104,027	45,296
Guavas.....	1,336	511	1,136	383	1,614	541	2,546	801	1,539	618
Mangoes.....	2,896	1,800	2,724	1,655	4,018	2,161	3,594	2,034	3,988	2,104
Olives, Ripe.....	3,079	1,903	3,237	1,651	3,950	2,257	3,770	2,210	7,481	5,065
Papayas.....	3,897	1,806	4,020	1,674	4,519	2,024	4,417	2,046	4,283	1,977
Peaches, Canned...	72,407	20,300	69,355	18,132	40,450	9,871	43,046	11,619	91,167	27,545
Pears, Canned...	5,532	1,609	40,366	12,071	12,577	3,410	2,237	626	1,541	405
Pineapple, Canned	418,096	120,827	526,627	148,960	553,187	153,048	528,787	150,651	547,721	152,800
Plums, Canned...	882	1,141	963	1,219	771	1,075	529	750	228	538
Fruit Mix, Tropical ²	9,316	3,017	12,186	4,655	9,284	3,672	5,763	2,350	9,562	3,858
Fruit Mix, Other...	30,088	9,511	49,889	16,618	35,422	10,270	32,410	8,999	37,026	11,286

¹ Black currants, gooseberries, lingon or partridge berries and loganberries. containing apricots, citrus, peaches or pears.

² Mixtures not

U.S. IMPORTS OF CANNED & FROZEN FOODS—Continued

	1984		1985		1986		1987		1988	
	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000
JUICES (1,000 gallons a.s. basis)*										
Apple or Pear (not mixed)	167,860	122,276	214,441	136,949	227,524	192,145	226,367	183,103	195,650	166,149
Grape	7,064	3,978	7,815	4,885	8,048	6,526	5,502	5,635	11,380	10,532
Lime	806	570	548	578	1,542	1,321	477	586	967	974
Orange Conc.	558,118	595,527	581,427	695,388	547,041	385,996	521,558	454,426	409,057	548,363
Citrus, other	22,314	37,150	8,909	10,995	31,227	32,502	16,185	17,513	15,824	18,295
Pineapple	37,722	28,322	56,613	43,988	64,821	48,406	56,544	42,082	60,039	44,221
Prune Juice	1,063	1,154	1,740	1,636	1,610	1,410	1,925	1,918	1,709	1,691
Other Fruit	6,806	19,185	7,609	22,624	9,175	27,233	8,120	25,979	9,645	33,660
Vegetable	507	1,443	832	2,129	1,706	3,511	2,169	3,776	n.a.	n.a.
VEGETABLES, Prep. or pres.										
Artichokes, Brined	9,967	5,869	9,989	5,248	9,980	5,565	11,014	7,568	8,352	7,541
Artichokes, other	30,054	15,085	28,680	13,215	31,810	14,041	30,693	17,877	27,017	25,154
Asparagus	6,587	6,452	5,251	4,749	5,078	4,478	5,923	5,217	5,499	5,770
Beans ¹	5,106	1,876	16,404	4,326	14,403	3,862	5,210	2,230	5,970	2,881
Broccoli, Frozen	65,405	21,288	77,147	25,666	117,151	34,495	194,818	49,701	178,152	47,993
Carrots, Canned	9,939	2,012	12,267	2,479	14,135	3,436	11,547	3,262	10,796	3,197
Cauliflower, Frozen	30,836	10,288	36,824	11,518	37,843	10,753	58,513	15,039	50,260	14,057
Chickpeas	2,177	554	1,410	469	773	310	1,076	373	881	404
Corn, Canned	10,117	4,083	11,307	4,378	14,583	5,236	15,563	5,594	20,062	7,222
Cucumbers, Brined	9,682	2,603	13,194	3,266	14,742	3,950	12,965	3,625	13,829	4,487
Mushrooms, Canned Up to 9 oz.	50,245	59,931	50,317	58,991	54,519	55,456	58,362	59,308	32,122	37,091
Mushrooms, Canned Over 9 oz.	112,737	100,707	96,193	75,539	98,165	61,689	92,915	65,688	76,524	76,533
Mushrooms, Straw, Canned	5,120	4,057	7,256	6,829	6,425	5,506	6,385	5,458	7,082	7,334
Mushrooms, Frozen	951	1,031	1,568	1,658	2,581	2,972	2,599	2,559	1,210	1,658
Okra, Frozen cut	18,237	4,457	19,423	5,275	14,760	4,093	18,332	4,877	11,147	2,966
Onions, Brined	3,699	1,389	4,017	1,313	3,262	1,232	3,495	1,320	2,960	1,319
Onions, Canned	8,431	5,413	10,014	6,553	8,922	6,185	9,500	6,585	11,687	8,396
Peas ²	30,844	10,386	25,434	7,809	20,130	7,390	24,020	8,745	43,875	16,316
Peas, Frozen	22,262	10,681	16,374	6,729	17,547	9,088	23,384	11,150	37,783	17,099
Pimientos	17,036	6,855	16,849	7,284	21,826	9,840	18,028	9,997	17,872	10,244
Potatoes, Frozen	49,732	10,363	69,081	13,444	73,527	15,530	93,901	20,062	101,907	21,986
Potatoes, Dehyd.	354	173	2,826	1,537	1,194	529	452	233	201	130
Potatoes, Canned	1,822	389	1,152	309	1,965	578	1,963	892	944	367
Sauerkraut	1,465	371	1,672	352	1,730	448	1,496	507	1,199	396
Tomato Paste	151,045	45,729	111,400	28,298	130,625	32,518	101,274	26,939	107,655	32,239
Tomato Sauce (incl. pulp)	28,000	7,143	33,586	8,447	31,590	7,338	17,201	3,528	10,761	3,000
Tomatoes, Canned	233,567	49,919	220,028	41,566	197,559	36,304	178,587	39,163	175,528	46,228
CANNED FISH										
Anchovies in oil	4,876	10,946	5,011	11,304	5,641	16,531	5,307	16,719	5,209	19,174
Anchovies not in oil	587	586	391	487	1,058	1,189	963	1,388	1,050	1,386
Herring in oil	256	295	294	291	190	225	239	253	317	350
Herring not in oil	4,244	6,386	5,582	8,275	5,707	9,390	5,617	8,726	6,541	10,264
Mackerel not in oil	9,231	3,575	10,921	4,177	10,609	3,896	13,837	5,277	18,033	7,256
Salmon in oil	22	56	92	148	47	181	37	71	12	22
Salmon not in oil	529	2,433	1,866	5,842	4,575	12,974	6,615	19,152	3,516	18,688
Sardines in oil	17,535	23,403	23,009	26,996	22,949	28,520	27,352	35,106	22,813	30,824
Sardines not in oil	27,216	18,402	34,213	21,990	30,315	21,049	37,670	25,470	30,546	23,154
Tuna in oil	277	494	303	560	301	707	329	869	318	744
Tuna not in oil	162,036	166,774	213,645	208,578	236,320	227,919	211,356	206,051	244,186	297,922
Bonito & yellowtail, in oil	151	142	89	68	129	112	183	125	109	86
Bonito & yellowtail, not in oil	10	53	30	57	49	107	21	111	33	130
Antipastos in oil	937	871	699	420	364	517	316	521	234	527
Fish cakes, balls, puddings	17,406	23,953	19,321	24,396	12,919	18,997	8,797	13,130	5,650	8,376
Surimi structured Products	n.a.	n.a.	n.a.	n.a.	5,384	8,037	4,787	6,786	2,574	4,361
Fish paste & sauce	9,766	4,167	12,506	4,714	13,842	5,444	12,002	5,588	12,867	5,414
Pollock	2,224	3,373	14,224	18,368	9,383	13,497	11,255	16,046	4,741	7,003
Roe	1,800	7,482	1,591	8,634	1,672	10,051	1,995	14,679	2,093	13,337
Other fish in oil	1,648	1,823	1,424	1,917	2,150	2,434	2,002	2,753	2,295	3,236
Other fish not in oil	1,956	3,537	1,984	4,358	1,793	4,491	2,807	6,816	1,841	4,348
Total	262,707	278,751	347,195	351,580	365,397	386,268	353,437	395,637	364,978	456,597

* Includes concentrates converted to a.s. equivalent salt, pickled or otherwise preserved, except dried.

²Green, wax, lima, dry.

¹Peas in brine packed in

U.S. IMPORTS OF CANNED & FROZEN FOODS—Continued

	1984		1985		1986		1987		1988	
	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000	1,000 Pounds	Value \$1,000
CANNED SHELLFISH										
Abalone ⁴	2,611	10,791	2,816	14,722	2,579	15,460	2,790	19,867	2,434	22,487
Clam juice	15	19	26	24	175	82	481	554	652	474
Clams, other	7,791	8,625	9,765	8,732	13,622	9,631	13,352	14,561	10,387	13,275
Clams, razor	49	52	33	48	88	151	141	173	229	244
Crab meat, snow (incl. paste)	998	4,002	1,314	3,805	1,102	3,739	1,541	4,851	1,353	3,805
Crab meat, other (incl. paste)	5,235	15,995	6,270	18,142	7,676	20,236	6,426	15,775	6,367	15,817
Lobster, American	384	2,005	869	6,017	352	2,971	637	4,184	594	5,342
Lobster, spiny	18	96	56	364	37	194	136	748	52	280
Shrimp	13,580	26,409	17,088	32,163	15,757	29,406	17,132	33,380	14,138	28,730
Oysters & juice	23,047	26,198	28,928	30,176	32,050	32,311	32,668	36,144	27,524	39,817
Total	53,728	94,192	67,165	114,193	73,438	114,181	75,304	130,237	63,730	130,271
FRESH OR FROZEN FISH										
Analog Products⁵										
(Surimi)	n.a.	n.a.	33,654	48,160	34,312	58,487	30,539	51,197	24,516	41,569
Freshwater fish	24,177	25,328	21,616	22,189	22,195	24,691	23,910	27,686	23,377	28,702
Salmon	21,097	56,497	27,038	75,598	40,549	100,669	41,902	113,038	59,144	155,173
Tuna	493,795	281,380	478,781	266,335	563,797	298,847	571,505	330,759	550,147	372,298
Other Saltwater	195,208	111,060	255,330	158,043	275,883	213,718	305,171	243,672	296,410	252,846
Blocks	316,165	262,901	334,060	275,064	363,897	379,887	403,577	539,358	303,237	382,482
Filets & steaks	473,594	606,551	536,725	713,861	538,532	826,791	620,985	1,115,123	517,709	909,888
sticks/similar prod.	2,355	2,838	925	1,247	1,568	2,022	1,977	2,509	2,120	2,475
Total (millions) ⁵	1,526	1,347	1,654	1,512	1,806	1,847	1,970	2,372	1,743	2,104
FRESH OR FROZ. SHELLFISH										
Scallops	27,270	117,296	42,035	147,070	47,916	192,558	39,934	162,273	32,039	115,706
Shrimp	328,916	1,189,941	342,818	1,120,749	384,349	1,404,931	461,173	1,676,844	489,740	1,725,971
Shell on	225,696	913,993	292,642	866,566	262,044	1,080,127	310,073	1,224,234	358,765	1,337,211
Peeled, Raw	75,662	205,038	77,532	173,298	91,843	221,263	116,708	313,521	96,520	244,016
Other	27,558	70,910	32,644	80,885	30,462	103,541	34,392	139,089	34,455	144,744
CANNED MEATS										
Beef sausages	61	43	32	55	0	0	0	0	247	276
Corned beef										
2 lbs. or less	76,289	73,088	78,354	69,289	56,887	53,893	63,678	79,509	71,649	65,226
over 2 lbs.	16,994	14,805	19,731	16,291	13,485	11,986	17,713	19,593	14,948	12,795
Beef, other										
2 lbs. or less	8,199	8,349	12,494	12,575	11,446	11,352	11,248	14,844	12,435	12,735
over 2 lbs.	26,021	27,342	31,095	37,031	16,631	17,012	32,258	52,001	48,208	72,951
Pork hams & shoulders										
less than 3 lbs.	13,381	16,631	17,998	22,694	15,918	21,440	15,432	21,670	14,916	18,829
3 lbs. and more	283,110	371,334	319,937	409,609	295,524	438,691	284,464	435,971	275,161	380,997
Bacon	3,045	3,093	2,702	3,210	3,280	4,870	6,985	9,902	9,388	12,115
Other canned pork	14,448	12,125	13,867	11,442	12,887	12,292	18,948	18,050	16,573	15,388

⁴May include fresh or dried and canned paste and sauce. ⁵Analog products which include imitation and simulated crab, lobster, shrimp, scallops and other fish and shellfish products fabricated from processed minced fish meat (such as surimi), are excluded from total.

LEADING U.S. EXPORT MARKETS AND PRODUCTS

U.S. EXPORTS TO SPECIFIED COUNTRIES

SOURCE: U.S.D.A., Foreign Agricultural Service,
Horticultural and Tropical Products Division & U.S. Department of Commerce

CANNED FRUITS

Basis 1,000 cases 24 no. 2½ cans (45 lbs.) Figures rounded - Calendar year

Country of Destination	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
APRICOTS, CANNED										
Canada	27	9	13	13	9	3	1	3	4	9
European Community	5	5	7	3	1	4	2	1	2	(b)
Other Western Europe	13	3	4	2	1	2	1	1	1	(b)
Asia	17	16	17	16	13	9	10	8	15	(b)
Oceania	5	3	2	1	....	1	1	2	(a)	(b)
Other .....	....	14	16	20	14	1	4	1	1	35
Total	67	51	59	55	38	19	19	16	23	44
CHERRIES, CANNED¹										
Canada	59	27	27	26	44	11	12	34	113	86
Mexico	2	2	1	2	....	1	....	(a)	(a)	(b)
European Community	90	296	49	68	21	1	5	4	57	(b)
Japan	50	48	49	41	33	34	29	33	31	39
Asia	24	16	14	13	16	41	56	49	52	(b)
Caribbean	10	4	3	4	4	....	....	(a)	(a)	(b)
Other	22	18	18	21	4	5	5	4	5	132
Total	257	411	161	175	122	94	108	124	259	258
MIXED FRUIT, CANNED										
Canada	931	770	879	657	447	397	246	176	306	288
Latin America	90	130	73	79	57	68	70	87	67	(b)
Germany, Federal Rep.	120	351	264	132	84	1	....	7	5	(b)
Netherlands	111	112	98	83	44	9	7	9	11	10
Other European Commty.	59	71	84	49	20	11	6	15	11	(b)
Other Western European	377	396	278	231	92	74	38	56	44	(b)
Asia	503	712	532	591	637	394	354	514	613	(b)
Caribbean	57	63	87	75	77	44	71	46	39	(b)
Other	35	37	156	56	60	61	26	10	17	865
Total	2,283	2,642	2,451	1,953	1,518	1,060	818	920	1,114	1,162
PEACHES, CANNED										
Canada	1031	945	788	663	408	294	155	142	82	107
Latin America	132	121	82	114	45	32	43	39	33	(b)
Germany, Federal Rep.	211	423	356	169	158	(a)	0	(a)	1	(b)
Netherlands	153	112	29	11	10	3	4	6	6	9
Other European Commty.	93	63	52	33	6	5	5	9	2	(b)
Other Western Europe	243	226	179	116	42	27	43	41	15	(b)
Japan	523	633	486	501	410	149	130	490	430	425
Asia	205	201	146	189	183	123	101	135	183	(b)
Other	31	94	2480	26	23	14	13	14	10	362
Total	2622	2818	2599	1822	1285	653	494	876	761	903
PEARS, CANNED										
Canada	43	24	33	22	21	6	1	1	7	8
Europe	23	30	31	29	10	6	12	26	11	(b)
Asia	39	33	38	39	46	20	14	18	28	(b)
Latin America	23	15	17	10	6	4	4	5	3	(b)
Other	23	22	22	25	10	20	8	6	8	40
Total	151	124	141	125	93	56	39	57	55	48
PINEAPPLES, CANNED										
Canada	251	248	319	391	381	380	196	232	228	310
Germany, Federal Rep.	70	37	32	52	38	65	16	26	23	46
Other European Commty.	75	62	60	67	53	86	45	43	43	(b)
Other Western Europe	57	12	10	27	51	19	24	17	26	(b)
Asia	48	39	60	27	42	44	44	² 159	18	(b)
Caribbean	21	18	21	17	11	13	6	10	5	(b)
Other	42	34	21	15	13	14	27	6	10	256
Total	564	450	523	596	590	624	359	493	354	612

¹Both sweet and sour. Excludes Maraschino Cherries. ²Includes 459,151 cases to Mexico. ³Includes 126,652 cases to the Philippines. (a) Less than 500 cases. (b) Included in "Other".

LEADING U.S. EXPORT MARKETS—CANNED VEGETABLES

Basis 1,000 cases 24/303 cans (24 lbs.). Figure rounded - Calendar year.

Country of Destination	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
ASPARAGUS										
Canada	1	2	10	....	1	6	....	....	4	14
Mexico	4	....	11	....	....	1	....	1	....	(b)
Latin America	28	38	8	8	2	5	2	1	1	(b)
European Community	59	40	34	29	29	35	33	25	34	(b)
Other Western Europe	19	24	27	23	12	16	12	15	15	(b)
Asia	21	21	66	44	50	21	16	12	8	(b)
Caribbean	25	54	46	4	2	2	....	1	4	(b)
Other	14	9	3	4	2	2	2	3	2	136
Total	171	188	205	112	99	89	65	58	69	150
BEANS, CANNED¹										
Canada	43	58	35	77	39	53	39	26	20	35
Mexico	113	97	84	24	5	6	18	24	12	16
Latin America	150	147	123	148	47	48	61	79	n.a.	(b)
Caribbean	92	88	171	311	216	154	205	253	n.a.	(b)
Europe	76	39	74	138	73	68	33	n.a.	n.a.	(b)
Asia	294	256	306	260	222	267	237	248	n.a.	(b)
Africa	79	37	35	22	11	14	3	5	n.a.	(b)
Other	43	86	48	65	38	54	39	83	n.a.	641
Total	890	808	876	1,047	651	663	635	718	597	692
CORN, CANNED										
Canada	127	103	67	75	144	41	23	97	75	72
Mexico	104	110	120	38	25	31	99	97	113	171
France	959	861	853	786	923	571	465	570	270	443
Germany, Federal Rep.	482	706	586	724	809	772	879	1,243	1,272	1,592
United Kingdom	348	398	348	513	832	912	834	777	745	918
Other Western Europe	539	529	635	851	705	732	854	939	1,078	(b)
Japan	939	1,554	3,001	1,772	1,743	1,301	1,487	2,219	3,499	4,300
Asia	662	573	728	742	665	780	759	981	1,165	(b)
Latin America	135	150	99	94	28	34	34	33	37	(b)
Caribbean	58	71	63	59	44	47	38	70	60	(b)
Other	40	50	43	62	148	34	86	27	38	3,104
Total	4,393	5,105	6,543	5,716	6,065	5,257	5,608	7,053	8,352	10,600
PEAS, CANNED										
Canada	11	5	....	11	4	1	....	5	2	(b)
Latin America	71	145	111	56	27	29	25	43	33	(b)
Caribbean	27	31	35	36	37	40	19	36	23	(b)
Asia	62	82	90	113	69	44	39	29	46	(b)
Oceania	25	41	26	33	59	37	28	29	31	(b)
Other	21	18	22	13	21	18	21	2	10	126
Total	217	322	284	262	217	176	132	144	145	126
TOMATOES, CANNED										
Canada	1,340	1,207	1,170	709	446	383	297	215	173	343
Europe	36	5	15	5	27	3	18	12	15	(b)
Latin America	216	63	24	2	....	1	....	3	4	(b)
Asia	78	99	94	76	83	84	304	330	101	(b)
Other	67	82	38	40	26	28	25	43	43	150
Total	1,737	1,456	1,341	832	583	498	644	602	335	493
TOMATO CONCENTRATES²										
Canada	1,309	918	996	891	966	858	625	673	732	906
Latin America	147	38	74	26	11	12	8	21	42	(b)
Caribbean	83	101	89	80	57	62	41	43	104	(b)
Asia	276	314	186	200	225	174	148	162	190	(b)
Oceania	164	32	37	35	39	36	35	36	39	(b)
Europe	12	12	17	20	13	17	42	41	15	(b)
Other	34	64	87	4	3	1	15	1	....	929
Total	2,025	1,479	1,486	1,257	1,314	1,161	909	978	1,122	1,834
TOMATO JUICE³										
	1,000 Gallons									
Canada	378	262	258	186	150	n.a.	n.a.	198	112	8
Mexico	99	241	214	30	5	n.a.	n.a.	n.a.	n.a.	3
Caribbean	123	263	222	292	169	n.a.	n.a.	n.a.	n.a.	(b)
Latin America	82	184	95	75	11	n.a.	n.a.	n.a.	n.a.	(b)
Middle East	971	1,147	1,787	1,371	851	n.a.	n.a.	n.a.	n.a.	(b)
Far East	1,154	1,475	1,056	974	673	n.a.	n.a.	n.a.	n.a.	(b)
Other	113	253	246	188	114	n.a.	n.a.	n.a.	n.a.	72
Total	2,950	3,825	3,878	3,116	1,973	1,490	1,274	1,581	1,411	83

¹Excludes dry beans & pickled beans. ²Includes tomato paste, pulp (puree) and sauce through 1985. Excludes pulp (puree) beginning 1986. ³Includes vegetable juices containing 70% or more tomato juice. n.a. - Data by area not available at press time. (b) Included in "Other".

U.S. IMPORTS—COUNTRY OF ORIGIN—FROZEN

SOURCE: United States Department of Agriculture, Foreign Agricultural Service, Horticultural and Tropical Products Division

Country of Origin	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
FROZEN VEGETABLES—1,000 Pounds										
PEAS										
Canada	n.a.	n.a.	n.a.	6,349	8,497	10,677	8,796	6,706	11,424	P
China, Taiwan	n.a.	n.a.	n.a.	4,072	3,607	2,895	4,469	9,211	10,057	P
Other	n.a.	n.a.	n.a.	5,924	3,347	8,691	3,109	1,629	1,903	P
Total	n.a.	n.a.	n.a.	16,345	15,450	22,262	16,374	17,547	23,384	37,783
BROCCOLI										
Mexico	n.a.	n.a.	n.a.	27,121	27,747	55,318	63,376	100,621	154,416	153,080
Guatemala	n.a.	n.a.	n.a.	4,674	5,564	10,024	12,666	18,290	27,344	22,148
El Salvador	n.a.	n.a.	n.a.	.....	.....	.....	181	1,526	1,290	2,330
Other	n.a.	n.a.	n.a.	75	240	62	926	752	1,270	597
Total	n.a.	23,898	27,822	31,870	33,552	65,404	77,148	117,150	194,820	178,156
CAULIFLOWER										
Mexico	n.a.	n.a.	n.a.	13,327	17,571	27,560	32,869	38,596	55,878	47,937
Guatemala	n.a.	n.a.	n.a.	7,083	3,239	3,111	2,835	2,167	1,614	1,532
Other	n.a.	n.a.	n.a.	161	276	165	1,120	1,338	1,021	794
Total	n.a.	n.a.	n.a.	20,571	21,085	30,836	36,824	*37,843	58,513	50,263
OKRA										
Mexico	n.a.	n.a.	n.a.	3,069	955	1,887	165	82	168	628
Dominican Republic	n.a.	n.a.	n.a.	10,472	10,391	8,417	9,491	5,293	3,373	3,768
El Salvador	n.a.	n.a.	n.a.	3,682	3,477	4,561	6,065	5,496	7,919	1,433
Guatemala	n.a.	n.a.	n.a.	6,437	7,037	3,369	3,702	3,948	6,872	5,280
Other	n.a.	n.a.	n.a.	516	450	2	.....	51	.....	37
Total	n.a.	n.a.	n.a.	24,176	22,309	18,237	19,423	*14,760	18,331	11,147
FROZEN ORANGE CONCENTRATE—1,000 gallons at 42° briz										
Belize	n.a.	n.a.	n.a.	506	.....	520	926	1,646	1,661	1,357
Brazil	n.a.	n.a.	n.a.	92,587	82,510	130,580	137,639	131,646	115,220	88,255
Canada	n.a.	n.a.	n.a.	135	87	29	490	908	295	82
Mexico	n.a.	n.a.	n.a.	4,321	6,391	4,314	2,244	7,949	9,709	12,077
Other	n.a.	n.a.	n.a.	506	278	1,137	985	931	750	567
Total	n.a.	n.a.	n.a.	98,054	89,265	136,581	142,285	143,081	127,634	102,338

*Totals revised. Data by country may not add to totals since revised country data not available. P - Not available at press time.

Twelfth Biennial Edition

THE 1988-89 DIRECTORY OF THE CANNING, FREEZING, PRESERVING INDUSTRIES

FOR FOOD BUYERS, The Directory is the ideal source book. It's the easy way to find basic food products, to find new products to spruce up your menu and to fill out your product line. This well-organized, easy to use directory will give you more detail about each company than any other directory. All of the information that you need to do business intelligently and efficiently with the packer is here. \$110 each

By the Publishers of THE ALMANAC[®]
Edward E. Judge & Sons, Inc.

P.O. Box 866, Westminster, MD 21157 USA (301) 876-2052



U.S. COMPETITION IN WORLD MARKETS

IMPORTS INTO SPECIFIED COUNTRIES BY COUNTRY OF ORIGIN

SOURCE: United States Department of Agriculture, Foreign Agricultural Service,
Horticultural and Tropical Products Division

SPECIFIED CANNED FRUITS

Importing Country and Country of origin	Calendar Year								
	1980	1981	1982	1983	1984	1985	1986	1987	1988
CHERRIES—1,000 Pounds									
GERMANY, W.									
Belgium-Lux.....	5,946	5,966	6,855	4,636	6,777	n.a.	n.a.	10,227	n.a.
Greece.....	3,808	4,966	2,039	710	864	n.a.	n.a.	761	n.a.
Italy.....	6,046	11,088	8,913	12,033	9,436	n.a.	n.a.	8,424	n.a.
Netherlands.....	15,189	10,056	16,033	8,508	11,318	n.a.	n.a.	13,380	n.a.
United States.....	7,893	3,607	2,595	547	106	n.a.	n.a.	11	n.a.
Yugoslavia.....	12,183	9,212	9,432	13,012	23,131	n.a.	n.a.	12,042	n.a.
Other.....	6,823	6,804	7,441	10,842	10,710	n.a.	n.a.	9,654	n.a.
TOTAL.....	57,888	51,699	53,308	50,287	62,342	63,061	58,422	54,498	n.a.
FRUIT MIXTURES—1,000 cases basis 2½ No. 2½ cans, 45 lb. per case									
FRANCE									
Italy.....	623	687	737	605	n.a.	n.a.	n.a.	n.a.	n.a.
Other.....	20	29	56	83	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL.....	643	716	793	688	735	926	1,132	882	1,014
JAPAN									
Australia.....	90	64	60	52	n.a.	36	n.a.	n.a.	n.a.
Greece.....	n.a.	n.a.	n.a.	n.a.	n.a.	31	n.a.	n.a.	n.a.
Philippines.....	50	38	40	37	n.a.	n.a.	n.a.	n.a.	n.a.
South Africa.....	n.a.	n.a.	n.a.	n.a.	n.a.	52	n.a.	n.a.	n.a.
United States.....	157	136	115	163	n.a.	87	n.a.	n.a.	n.a.
Other.....	1	7	4	13	n.a.	15	n.a.	n.a.	n.a.
TOTAL.....	298	245	219	265	213	221	283	400	456
PEACHES—1,000 cases basis 2½ No. 2½ cans, 45 lb. per case									
CANADA									
Australia.....	94	178	248	275	189	n.a.	n.a.	n.a.	n.a.
South Africa.....	206	250	238	171	198	n.a.	n.a.	n.a.	n.a.
Other.....	4	2	3	72	460	n.a.	n.a.	n.a.	n.a.
Subtotal.....	304	430	489	518	847	826	1,010	947	n.a.
United States.....	997	880	708	427	306	182	164	134	n.a.
TOTAL.....	1,301	1,310	1,197	945	1,153	1,008	1,174	1,081	n.a.
JAPAN									
Australia.....	272	317	314	297	n.a.	148	191	289	n.a.
Greece.....	n.a.	n.a.	n.a.	n.a.	n.a.	165	291	331	n.a.
South Africa.....	125	204	219	486	n.a.	322	754	737	n.a.
United States.....	688	502	485	465	n.a.	144	597	449	n.a.
Other.....	6	6	5	4	n.a.	17	54	148	n.a.
TOTAL.....	1,091	1,029	1,023	1,251	851	795	1,887	1,953	n.a.
UNITED STATES									
Australia.....	n.a.	n.a.	....	....	....	40	....	145	45
Chile.....	n.a.	n.a.	....	....	132	244	154	209	450
Greece.....	n.a.	n.a.	....	2	190	275	459	443	1,139
Spain.....	n.a.	n.a.	....	158	433	523	55	99	254
South Africa.....	n.a.	n.a.	....	11	593	301	143	....	....
Other.....	n.a.	n.a.	17	7	² 262	² 158	102	61	138
TOTAL.....	10	11	17	178	1,609	1,541	913	957	2,026

n.a. - Comparable data not available.
1985 respectively.

²Includes 192,000 cases and 65,000 cases from Argentina in 1984 and

IMPORTS INTO SPECIFIED COUNTRIES—FRUITS—Continued

Importing Country and Country of origin	Calendar Year								
	1980	1981	1982	1983	1984	1985	1986	1987	1988
PEARS—1,000 cases basis 24 No. 2½ cans, 45 lb. per case									
CANADA									
Australia	156	167	198	175	193	n.a.	n.a.	n.a.	n.a.
Other	51	97	107	143	157	n.a.	n.a.	n.a.	n.a.
Subtotal	207	264	305	318	350	430	414	382	n.a.
United States	41	40	34	18	8	3	2	11	n.a.
TOTAL	248	304	339	336	358	433	416	393	n.a.
FRANCE									
Italy	401	517	639	449	n.a.	n.a.	n.a.	n.a.	n.a.
Other	26	42	117	83	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL	427	559	756	532	470	426	681	485	681
PINEAPPLE—1,000 cases basis 24 No. 2½ cans									
CANADA									
Australia	85	74	67	43	39	n.a.	n.a.	n.a.	n.a.
China, Taiwan	124	36	16	7	....	n.a.	n.a.	n.a.	n.a.
Philippines	604	547	392	239	410	n.a.	n.a.	n.a.	n.a.
Singapore	27	26	15	13	....	n.a.	n.a.	n.a.	n.a.
South Africa	136	171	132	144	148	n.a.	n.a.	n.a.	n.a.
Thailand	410	358	365	417	564	n.a.	n.a.	n.a.	n.a.
United States	296	518	369	317	494	244	193	222	n.a.
Other	29	24	18	15	60	n.a.	n.a.	n.a.	n.a.
TOTAL	1,711	1,754	1,374	1,195	1,715	1,764	1,524	1,601	n.a.
UNITED STATES									
China, Taiwan	829	246	150	57	80	199	197	280	133
Ivory Coast	83	80	27	3	0	6	....	....	....
Malaysia	178	144	214	212	168	209	253	263	242
Mexico	602	247	171	142	146	203	310	341	175
Philippines	4,933	4,265	4,579	4,550	4,561	6,041	5,309	4,944	4,579
Singapore	219	242	235	188	204	180	254	255	186
South Africa	183	405	574	708	548	638	391	1	....
Thailand	3,214	3,860	3,511	3,061	3,428	3,938	5,292	5,052	6,319
Other	24	60	46	77	155	289	410	616	539
TOTAL	10,265	9,549	9,507	8,998	9,291	11,703	12,416	11,751	12,172
FROZEN ORANGE CONCENTRATE—1,000 gallons at 42° brix See page 612 for U.S. Imports of Frozen Conc. Orange Juice.									
CANADA									
Belize .....	....	....	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Brazil	11,299	16,865	16,072	14,148	16,110	n.a.	n.a.	n.a.	n.a.
Mexico	380	730	651	856	278	n.a.	n.a.	n.a.	n.a.
Panama	23	....	....	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
U.S. ¹	9,387	9,459	7,904	9,132	9,011	9,563	11,467	8,197	n.a.
Other .....	....	....	26	160	23	n.a.	n.a.	n.a.	n.a.
TOTAL	21,089	27,054	24,653	24,296	25,422	23,831	25,027	25,314	n.a.

n.a. - Comparable data not available.

¹ Assumes that 5% of U.S. shipments are bulk concentrate at 65° brix.

IMPORTS INTO SPECIFIED COUNTRIES—Continued

CANNED VEGETABLES

1,000 cases, equiv. 24/303's (24 lbs.)

Importing Country and Country of origin	Calendar Year								
	1980	1981	1982	1983	1984	1985	1986	1987	1988
MUSHROOMS—1,000 cases basis 24 lb., drained weight per case									
CANADA									
China, Mainland.....	418	355	566	597	920	n.a.	n.a.	n.a.	n.a.
China, Taiwan.....	595	418	304	195	280	n.a.	n.a.	n.a.	n.a.
France.....	76	81	101	53	201	296	n.a.	n.a.	n.a.
Hong Kong.....	38	249	231	232	271	n.a.	n.a.	n.a.	n.a.
Korea, Republic of.....	185	331	229	107	....	n.a.	n.a.	n.a.	n.a.
South Africa.....	29	5	....	....	....	n.a.	n.a.	n.a.	n.a.
United Kingdom.....	....	....	....	....	....	n.a.	n.a.	n.a.	n.a.
Other.....	38	51	28	50	133	n.a.	n.a.	n.a.	n.a.
TOTAL.....	1,379	1,490	1,459	1,234	1,966	2,606	2,204	n.a.	n.a.
UNITED STATES									
China, Mainland.....	618	1,144	1,526	1,528	1,886	1,916	2,023	2,612	2,198
China, Taiwan.....	2,239	1,013	1,593	1,772	2,579	2,036	2,183	2,407	1,065
Hong Kong.....	816	978	678	711	930	1,293	1,731	900	691
Indonesia.....	n.a.	n.a.	n.a.	....	....	37	89	130	366
Korea, Republic of.....	809	393	216	333	485	419	322	187	148
Spain.....	n.a.	7	1	96	640	440	184	202	232
Other.....	154	126	175	227	484	266	261	131	123
TOTAL.....	4,636	3,661	4,190	4,668	7,004	6,407	6,792	6,569	4,822
TOMATOES—1,000 cases basis 24/303									
CANADA									
Bulgaria.....	51	78	152	34	4	n.a.	n.a.	n.a.	n.a.
China, Taiwan.....	9	18	41	12	65	n.a.	n.a.	n.a.	n.a.
Israel.....	114	173	162	38	81	n.a.	n.a.	n.a.	n.a.
Italy.....	465	818	1,019	458	597	1,103	n.a.	n.a.	n.a.
Portugal.....	102	171	171	175	298	n.a.	n.a.	n.a.	n.a.
Spain.....	424	800	985	840	1,066	n.a.	n.a.	n.a.	n.a.
United States.....	1,309	1,015	547	443	343	319	243	272	n.a.
Other.....	12	273	145	42	118	n.a.	n.a.	n.a.	n.a.
TOTAL.....	2,486	3,346	3,222	2,042	2,571	2,794	1,857	1,850	n.a.
UNITED STATES									
Greece.....	....	1	....	....	2	n.a.	n.a.	3	21
Israel.....	173	598	1,030	2,032	1,455	1,414	1,103	776	395
Italy.....	1,171	2,380	3,217	2,536	3,809	4,039	4,530	3,964	4,298
Mexico.....	21	13	4	4	....	11	....	1	3
Spain.....	246	983	2,386	2,534	3,067	2,933	2,037	2,156	1,781
Taiwan.....	n.a.	n.a.	n.a.	271	1,274	567	481	334	348
Other.....	51	77	253	403	126	204	179	208	467
TOTAL.....	1,662	4,051	6,959	7,780	9,732	9,168	8,330	7,441	7,314
TOMATO CONCENTRATES—1,000 cases basis 24/303 cans, 24 lb. per case									
CANADA									
Greece.....	49	47	34	56	74	n.a.	n.a.	n.a.	n.a.
Italy.....	7	93	263	366	222	n.a.	n.a.	n.a.	n.a.
Mexico.....	185	131	84	25	15	n.a.	n.a.	n.a.	n.a.
Portugal.....	846	840	389	403	454	n.a.	n.a.	n.a.	n.a.
Spain.....	62	193	51	25	17	n.a.	n.a.	n.a.	n.a.
United States.....	615	495	272	187	83	*701	*679	*710	n.a.
Other.....	79	322	294	395	431	n.a.	n.a.	n.a.	n.a.
TOTAL.....	1,843	2,121	1,387	1,457	1,295	*2,759	*2,578	*2,639	n.a.
UNITED STATES									
Brazil.....	n.a.	n.a.	n.a.	182	132	118	67	79	1,068
Chile.....	8	81	126	139	103	125	124	249	284
China, Taiwan.....	1	349	2,126	953	501	125	55	81	....
Israel.....	67	790	1,044	1,382	1,286	1,636	1,692	648	259
Italy.....	....	....	990	1,113	627	945	855	679	331
Mexico.....	781	694	1,504	1,329	1,830	634	1,239	1,403	1,764
Portugal.....	187	460	1,133	1,314	1,910	1,302	1,591	703	441
Spain.....	17	276	394	572	615	788	573	425	90
Turkey.....	....	57	260	287	143	137	361	368	174
Other.....	69	390	1,584	411	312	229	314	302	*523
TOTAL.....	1,130	3,097	9,161	7,682	7,460	6,041	6,911	4,936	4,934

n.a. - Comparable data not available.
paste and paste otherwise prep. or prea.

¹Includes 307,173 cases from Chile.

²Includes 360,451 cases from Hungary.

³Data is for canned tomato

FRUIT PACKS IN SPECIFIED COUNTRIES BY COMMODITY

SOURCE: United States Department of Agriculture, Foreign Agricultural Service
Horticultural and Tropical Products Division

NOTE: The annual canned fruit packs in the Southern Hemisphere countries (Australia, South Africa, etc.) commence in November or December of each year and become seasonally heavy in the following January or February. For the purposes of this table such packs are aligned with the U.S. packing marketing season which commences the following summer. For example, the Southern Hemisphere packs completed in early 1984 are shown under the column for 1984 (marketing season 1984-85).

MARKETING SEASONS BEGINNING YEAR SHOWN

Commodity and Country	1981	1982	1983	1984	1985	1986	1987	*1988
1,000 cases, equiv. 24/2½'s (45 lbs.)								
APPLES & APPLESAUCE								
Canada.....	694	784	797	707	823	668	735	P
Germany, West.....	2,211	1,932	1,820	1,643	1,743	1,862	1,865	P
South Africa.....	204	223	173	231	184	n.a.	n.a.	P
United States.....	10,136	12,461	12,033	n.a.	n.a.	n.a.	n.a.	n.a.
APRICOTS								
Australia.....	545	240	436	235	283	284	255	358
Canada.....	31	46	33	32	32	29	24	P
Greece.....	2,515	1,999	2,352	2,352	4,595	2,478	3,015	1,784
South Africa.....	707	587	470	570	373	429	500	600
Spain.....	980	1,372	1,062	2,058	1,842	1,382	1,372	549
United States.....	1,208	1,626	1,167	1,861	1,532	505	1,281	1,381
CHERRIES								
France.....	421	666	568	769	534	309	750	377
Germany, West.....	1,717	2,286	2,852	2,447	2,102	2,195	2,520	P
Italy.....	416	490	588	588	343	441	392	294
Japan.....	539	616	755	381	615	537	449	539
United States:								
Red Pitted.....	213	471	189	389	390	253	474	434
Sweet.....	316	498	496	357	405	327	451	439
FRUIT MIXTURES								
Argentina.....	220	245	318	279	284	245	245	309
Australia.....	1,728	958	1,176	1,264	1,377	1,377	1,460	P
France.....	1,070	1,112	1,333	1,450	1,200	1,102	1,019	980
Greece.....	n.a.	n.a.	n.a.	n.a.	n.a.	1,299	1,699	1,054
Italy.....	2,603	3,062	3,478	3,821	4,164	3,527	4,164	3,429
Japan.....	185	192	156	148	187	189	177	171
South Africa.....	1,935	1,280	1,692	1,757	1,887	1,631	2,034	2,010
United States.....	14,895	12,028	9,596	11,177	12,567	10,821	11,777	12,030
PEACHES								
Argentina.....	1,861	1,862	2,205	2,009	2,205	1,715	1,764	2,205
Australia.....	3,406	1,841	1,888	1,279	2,185	2,067	1,955	1,994
Canada.....	142	252	206	140	309	260	321	P
Chile.....	612	588	563	607	784	931	1,102	1,543
France.....	1,237	1,249	1,636	1,435	1,724	1,700	1,636	1,617
Greece.....	4,605	6,943	6,132	11,916	9,156	8,328	8,783	11,023
Italy.....	1,874	3,527	3,429	3,919	3,919	3,919	4,409	3,429
Japan.....	1,805	1,884	1,703	1,393	1,554	1,372	1,278	1,127
South Africa.....	4,158	3,652	3,252	3,863	3,063	3,613	3,455	3,387
Spain.....	784	1,568	3,869	4,164	4,115	3,723	4,409	2,939
United States.....	21,763	18,608	11,421	19,512	18,401	15,506	15,898	18,512
PEARS								
Australia.....	2,284	1,046	1,425	1,363	1,734	1,734	1,744	2,067
Canada.....	398	296	261	238	271	261	267	P
France.....	886	1,298	1,210	1,357	1,239	926	1,318	946
Italy.....	2,582	3,037	3,282	2,841	2,126	2,107	2,696	2,450
Japan.....	30	64	33	23	31	27	22	20
South Africa.....	1,415	938	1,051	1,300	1,542	1,131	1,415	1,481
United States.....	9,700	7,789	7,214	7,657	7,813	7,209	9,125	9,169
PLUMS & PRUNES								
Canada.....	57	52	20	34	40	39	40	P
Germany, West.....	338	874	636	607	786	400	744	P
United Kingdom.....	378	n.a.	492	487	534	n.a.	n.a.	P
United States.....	940	375	443	577	642	632	488	592

See Notes on Following Page

WORLD FRUIT PACKS BY COMMODITY — Continued

Commodity and Country	1981	1982	1983	1984	1985	1986	1987	1988
PINEAPPLE								
Australia.....	1,715	1,421	1,519	1,871	1,687	n.a.	1,965	1,969
Ivory Coast.....	2,841	784	490	984	1,176	980	852	56
Kenya.....	n.a.	n.a.	n.a.	1,653	2,181	2,241	2,172	1,960
Malaysia.....	1,764	1,862	1,911	2,129	2,146	1,929	1,970	2,023
Martinique ³	456	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mexico.....	3,135	1,225	392	614	931	931	955	808
Philippines.....	10,435	10,239	8,818	16,845	11,056	10,283	10,351	10,346
South Africa.....	2,890	2,694	2,597	2,547	3,150	2,787	3,247	3,189
Taiwan.....	245	98	196	327	518	598	598	438
Thailand.....	7,839	7,104	6,712	9,303	10,680	11,611	12,591	16,706
Hawaii.....	6,810	8,181	9,112	7,251	26,663	27,740	26,696	26,312

² USDA estimate based on the assumption of a 34% cannery yield, 30% yield beginning 1987. ³ Imports into France. ⁴ Plums only. n.a. - Not available. P - Not available at press time.

FRUIT PACKS BY COUNTRY

1,000 cases, equiv. 24 2½'s (45 lbs.)

(Pack year - See note under head on previous page.)

Country and Commodity	1981	1982	1983	1984	1985	1986	1987	*1988
AUSTRALIA								
Apricots.....	545	240	436	235	283	284	255	358
Fruit Mixtures.....	1,728	958	1,176	1,264	1,377	1,377	1,460	P
Peaches.....	3,406	1,841	1,888	1,279	2,185	2,067	1,955	1,994
Pears.....	2,284	1,046	1,425	1,363	1,734	1,734	1,744	2,067
Pineapple.....	1,715	1,421	1,519	1,871	1,687	n.a.	1,965	1,969
Total (these prod.)....	9,678	5,506	6,444	6,012	7,266	5,462	7,379	6,388
CANADA								
Apples & Sauce.....	694	784	797	707	823	668	735	P
Apricots.....	31	46	33	32	32	29	24	P
Peaches.....	142	252	206	140	309	260	321	P
Pears.....	398	296	261	238	271	261	267	P
Plums & Prunes.....	57	52	20	34	40	39	40	P
Total (these prod.)....	1,322	1,430	1,317	1,151	1,475	1,257	1,387	P
FRANCE								
Cherries.....	421	666	568	769	534	309	750	377
Fruit Mixtures.....	1,070	1,112	1,333	1,450	1,200	1,102	1,019	980
Peaches.....	1,237	1,249	1,636	1,435	1,724	1,700	1,636	1,617
Pears.....	886	1,298	1,210	1,357	1,239	926	1,318	946
Total (these prod.)....	3,614	4,326	4,747	5,011	4,697	4,037	4,723	3,920
GERMANY, WEST								
Apples & Sauce.....	2,211	1,932	1,820	1,643	1,743	1,862	1,865	P
Cherries.....	1,717	2,286	2,852	2,447	2,102	2,195	2,520	P
Plums & Prunes.....	338	874	636	607	786	400	744	P
Total (these prod.)....	4,266	5,092	5,308	4,698	4,631	4,457	5,129	P
GREECE								
Apricots.....	2,515	1,999	2,352	2,352	4,595	2,478	3,015	1,784
Fruit Mixtures.....	n.a.	n.a.	n.a.	n.a.	n.a.	1,299	1,699	1,054
Peaches.....	4,605	6,943	6,132	11,916	9,156	8,328	8,783	11,023
Total (these prod.)....	7,120	8,942	8,484	14,268	13,751	12,105	13,497	13,861
ITALY								
Cherries.....	416	490	588	588	343	441	392	294
Fruit Mixtures.....	2,603	3,062	3,478	3,821	4,164	3,527	4,164	3,429
Peaches.....	1,874	3,527	3,429	3,919	3,919	3,919	4,409	3,429
Pears.....	2,582	3,037	3,282	2,841	2,126	2,107	2,695	2,450
Total (these prod.)....	7,475	10,116	10,777	11,169	10,552	9,994	11,660	9,602
SOUTH AFRICA								
Apples & Sauce.....	204	223	173	231	184	n.a.	n.a.	P
Apricots.....	707	587	470	570	373	429	500	600
Fruit Mixtures.....	1,935	1,280	1,692	1,757	1,887	1,631	2,034	2,010
Peaches.....	4,158	3,652	3,252	3,863	3,063	3,613	3,455	3,387
Pears.....	1,415	988	1,051	1,300	1,542	1,131	1,415	1,481
Pineapple.....	2,890	n.a.	2,597	2,547	3,150	2,787	3,247	3,189
Total (these prod.)....	11,309	6,680	9,235	10,268	10,199	9,591	10,651	10,667

* Preliminary. P - Not available at press time.

VEGETABLE PACKS IN SPECIFIED COUNTRIES BY COMMODITY

(Pack year—See note under fruit packs, this section)

SOURCE: United States Department of Agriculture, Foreign Agricultural Service
Horticultural and Tropical Products Division

Item & Country	1980	1981	1982	1983	1984	1985	1986	r1987	*1988
1,000 cases, equiv. 24/303's (24 lbs.)									
ASPARAGUS									
Canada.....	659	629	530	379	473	729	288	520	484
France.....	96	118	73	85	n.a.	65	40	93	73
Japan.....	1,106	878	n.a.	759	666	508	459	491	450
Spain.....	2,296	2,067	1,791	2,067	3,674	3,491	n.a.	4,134	3,582
Taiwan.....	8,071	5,191	5,733	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
United States...	2,535	2,844	2,727	2,549	2,928	3,097	3,154	3,361	3,846
BEANS, GREEN									
Canada.....	1,808	1,611	1,577	1,752	1,592	1,352	883	1,436	1,479
France.....	2,065	2,330	1,727	1,268	14,482	20,172	20,025	19,391	19,547
Germany, W.....	2,284	2,576	2,439	1,603	1,098	2,164	2,476	1,381	n.a.
Italy.....	2,710	2,480	1,598	1,678	n.a.	1,918	2,081	1,608	1,998
United States (a)...	54,769	49,797	46,335	44,227	49,566	53,229	47,003	54,138	*44,784
BEANS, WAX									
Canada.....	1,574	1,379	1,435	1,416	1,247	1,155	1,008	1,102	1,175
United States (a)...	3,384	3,012	2,496	2,279	2,523	2,274	1,935	1,943	1,071
BEANS, LIMA									
United Kingdom...	873	781	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
United States...	2,833	2,602	2,275	2,338	2,316	1,966	1,738	1,329	1,267
BEETS									
Canada.....	612	531	406	399	670	480	439	789	509
United States...	10,878	9,657	10,868	9,039	9,292	9,386	9,042	12,127	*8,257
CARROTS									
Canada.....	.....	.....	.....	.....	326	323	278	451	413
Germany, W.....	685	1,075	1,117	645	680	916	539	375	n.a.
United Kingdom...	5,153	5,778	n.a.	5,152	4,013	4,754	n.a.	3,626	3,174
United States...	4,365	5,251	5,932	4,695	5,100	4,486	4,344	5,196	*3,715
CORN									
Canada.....	2,650	2,641	2,892	2,526	2,959	3,009	2,219	3,117	2,839
France.....	n.a.	n.a.	n.a.	n.a.	n.a.	4,343	2,508	2,508	4,409
Italy.....	n.a.	n.a.	n.a.	n.a.	n.a.	1,562	1,640	1,176	1,240
United States...	50,574	57,949	60,522	51,595	56,879	55,729	55,090	59,177	50,831
MUSHROOMS									
Canada.....	543	661	894	735	597	643	639	643	643
France.....	9,605	9,723	11,060	12,181	n.a.	6,467	5,870	5,870	6,292
Germany, W.....	409	371	331	469	288	277	286	376	n.a.
Korea, Rep.....	1,177	692	485	445	603	503	271	349	n.a.
Taiwan.....	2,785	2,477	2,312	2,316	2,324	2,563	2,455	1,768	n.a.
PEAS, GREEN									
Canada.....	3,508	3,080	3,312	2,403	3,860	3,889	2,109	2,236	2,008
France.....	12,560	15,582	14,220	17,416	n.a.	10,332	10,876	11,096	14,918
Germany, W.....	672	700	1,127	462	450	609	780	397	n.a.
Italy.....	.....	.....	4,156	4,172	n.a.	3,996	4,235	3,996	4,409
United Kingdom...	6,099	5,438	n.a.	5,179	5,083	4,256	n.a.	3,344	4,198
United States...	30,056	27,296	24,790	20,827	23,312	29,306	20,919	23,057	12,434
SAUERKRAUT									
Germany, W.....	8,729	11,724	12,294	10,286	12,077	12,144	9,071	6,986	n.a.
United States...	8,173	8,686	8,417	5,844	7,011	7,687	7,719	6,985	n.a.
SPINACH									
France.....	1,903	1,672	2,058	2,728	n.a.	2,352	2,352	1,304	1,470
United States...	6,314	5,458	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
TOMATOES									
Canada.....	4,078	4,948	6,940	4,674	6,762	5,221	4,379	5,146	6,053
Greece.....	2,756	1,002	907	815	1,158	1,470	1,470	1,102	1,332
Italy.....	97,369	92,777	77,750	101,045	126,233	82,673	53,921	89,654	82,672
Portugal.....	562	785	919	520	490	334	n.a.	n.a.	n.a.
Spain.....	10,564	8,175	18,464	18,555	23,792	18,601	10,674	16,259	18,004
Taiwan.....	799	367	564	768	1,745	659	607	579	579
United States (b)...	53,096	51,937	63,089	61,561	66,376	59,585	63,148	73,237	*50,626

(a) Calendar year thru 1985.

(b) Calendar year pack.

n.a. - Not available.

¹Tin & glass only.

²Excludes California Concentrated Crushed.

r - revised.

*Preliminary.

WORLD VEGETABLE PACKS BY COMMODITY — Continued

Item & Country	1980	1981	1982	1983	1984	1985	1986	r1987	*1988
TOMATO PASTE									
Canada	534	911	1,495	1,106	1,525	1,927	2,359	2,580	2,842
France	4,970	4,950	4,593	3,693	4,510	5,282	3,311	2,854	3,977
Greece	14,601	11,946	14,886	16,332	23,755	20,981	11,510	12,897	15,891
Italy	27,282	28,017	28,833	34,906	52,001	37,258	24,343	20,209	22,965
Mexico	5,511	5,144	n.a.	n.a.	n.a.	n.a.	2,809	3,218	4,042
Portugal	6,707	5,971	7,040	9,078	10,858	11,539	8,967	7,147	7,900
South Africa	363	....	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Spain	4,501	4,614	6,246	6,430	7,716	6,853	5,144	5,236	6,246
Taiwan	3,674	4,038	3,647	5,493	3,674	3,338	2,978	2,442	2,296
Turkey	4,409	4,593	n.a.	n.a.	11,023	14,238	9,186	12,860	15,616
TOMATO JUICE									
Canada	7,590	8,821	8,505	7,129	8,727	6,449	6,178	6,743	7,136
Greece	1,838	873	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Italy	10,104	2,388	n.a.	n.a.	2,030	1,837	1,837	1,332	1,470
Spain	367	276	257	n.a.	n.a.	n.a.	n.a.	885	942
United States	26,617	17,507	23,955	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

¹Includes small quantities of canned tomatoes.

r - revised.

*Preliminary.

VEGETABLE PACKS BY COUNTRY

	1980	1981	1982	1983	1984	1985	1986	r1987	*1988
1,000 cases, equiv. 24/303's (24 lbs.)									
CANADA									
Asparagus	359	629	530	379	473	729	288	520	484
Beans, grn.	1,808	1,611	1,577	1,752	1,592	1,352	883	1,436	1,479
Beans, wax	1,574	1,379	1,435	1,416	1,247	1,155	1,008	1,102	1,175
Beets	612	531	406	399	670	480	439	789	509
Carrots .....	....	....	....	....	326	323	278	451	413
Corn	2,550	2,641	2,892	2,526	2,959	3,009	2,219	3,117	2,839
Mushrooms	543	661	894	735	597	643	689	643	643
Peas, green	3,508	3,080	3,312	2,403	3,860	3,889	2,109	2,236	2,008
Tomatoes	4,078	4,948	6,940	4,674	6,782	5,221	4,379	5,146	6,053
Tomato Juice	7,590	8,821	8,505	7,129	8,727	6,449	6,178	6,743	7,136
Tomato Paste	n.a.	n.a.	n.a.	n.a.	n.a.	1,927	2,359	2,580	2,842
FRANCE									
Asparagus	96	118	73	85	n.a.	65	40	93	73
Beans, green	2,065	2,330	1,727	1,268	14,482	20,172	20,025	19,391	19,547
Corn	n.a.	n.a.	n.a.	n.a.	n.a.	4,343	2,508	2,508	4,409
Mushrooms	9,605	9,723	11,060	12,181	n.a.	6,467	5,870	5,870	6,292
Peas, green	12,560	15,582	14,220	17,416	n.a.	10,332	10,876	11,096	14,918
Spinach	1,903	1,672	2,058	2,315	n.a.	2,352	2,352	1,304	1,470
Tomato conc. ¹	4,970	4,950	4,593	3,693	4,510	5,282	3,311	2,854	3,977
GERMANY, WEST									
Beans, grn.	2,284	2,576	2,439	1,603	1,098	2,164	2,476	1,381	n.a.
Carrots	685	1,075	1,117	645	680	916	539	375	n.a.
Mushroom	409	371	331	469	288	277	286	376	n.a.
Peas, green	672	700	1,127	462	450	609	780	397	n.a.
Sauerkraut	8,729	11,724	12,294	10,286	12,077	12,144	9,071	6,986	n.a.
ITALY									
Beans, grn.	2,710	2,480	1,598	1,678	n.a.	1,918	2,081	1,608	1,998
Corn	n.a.	n.a.	n.a.	n.a.	n.a.	1,562	1,640	1,176	1,240
Peas, grn.	4,593	4,593	4,156	4,172	n.a.	3,996	4,235	3,996	4,409
Tomatoes	97,369	92,777	77,750	101,045	126,233	82,673	53,921	89,654	n.a.
Tomato conc.	27,282	28,017	28,833	34,906	52,001	37,258	24,343	20,209	22,965
Tomato juice	10,104	2,388	2,205	n.a.	n.a.	1,837	1,837	1,332	1,470
PORTUGAL									
Tomato conc.	6,707	5,785	7,040	9,078	10,858	11,539	8,967	7,147	7,900
SPAIN									
Asparagus	2,296	2,067	1,791	2,067	3,674	3,491	n.a.	4,134	3,582
Tomato conc.	4,501	3,858	6,246	6,430	7,716	6,853	5,144	5,236	6,246
Tomatoes	10,564	8,175	18,464	18,555	23,792	18,601	10,674	16,259	18,004
UNITED KINGDOM									
Beans, butter ...	873	781	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Carrots	5,153	5,778	n.a.	5,152	4,013	4,754	n.a.	3,626	3,174
Peas, grn.	6,099	5,438	n.a.	5,179	5,083	4,256	n.a.	3,344	4,198

¹Includes small quantities of canned tomatoes.

r - revised.

*Preliminary.

THE ALMANAC

OF THE CANNING, FREEZING, PRESERVING INDUSTRIES

Section X

CANNED FOOD PRICES

Source: monthly issues of "Food Production Management" Magazine

Prices given represent the high and low canners spot selling price, f.o.b. factory, subject to customary discounts, including brokerage. Prices per case, unless otherwise noted. The first price (or range) for a given item, in a given year, does not necessarily represent the price for the first of the month indicated, as every effort was made to reflect opening prices. Date of opening prices depends on the season, the area and the market situation. Where no price is shown, no price was listed in the Source.

VEGETABLES

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
BEANS—GR., SNAP							
Midwest ex. std. cut, 4 sv. 24/303							
Aug. 1	5.50-5.60	6.35	7.25	7.25	6.00-6.50	6.75	7.75-8.00
Oct. 1	5.35-5.50	6.25-6.50	7.00-7.25	6.50-6.75	6.00-6.50	7.00	7.75
Jan. 1	5.35-5.75	6.40-6.50	7.00	6.50-6.75	6.50-6.75	7.00	7.75
Apr. 1	5.35-5.50	6.50-7.00	7.25	6.75	6.75-7.00	7.00	7.75
South Std. cut 24/303							
Aug. 1	6.00	6.00	6.50	6.25-6.75	6.25	6.50	6.75
Oct. 1	6.00	6.25	6.50	6.25	6.50	6.50	7.00
Jan. 1	6.00	6.25	6.50	6.25	6.50	6.50	n.a.
Apr. 1	6.00	6.25-6.50	6.75	6.00-6.75	6.50	6.50	n.a.
N.W. Bl. Lakes fcy. cut 3 sieve 24/303							
Aug. 1	6.20-7.30	6.50-7.45	8.00	7.75-7.85	7.25-7.50	7.25-7.50	8.25
Oct. 1	5.90-7.30	6.95-8.45	8.00	7.25-7.35	7.25	7.25-7.50	8.25
Jan. 1	5.90-7.00	6.95-7.70	8.00	7.25-7.35	7.75	7.25-7.50	8.25
April 1	5.80-6.60	7.25-7.70	8.25	6.75-7.35	7.75	7.25-7.50	n.a.
6/10							
Aug. 1	7.50-10.50	9.25-9.50	11.50	9.50	9.00-9.50	9.50-10.00	11.00
Oct. 1	8.75-10.50	9.75-10.25	11.50	9.25	9.00	9.50-11.00	11.00
Jan. 1	8.75-10.50	10.00-10.25	11.50	8.75-9.25	9.50	9.75-11.00	11.00
April 1	9.00-9.25	10.75	11.50	7.95-8.75	9.50	9.75-10.25	n.a.

CANNED FOOD PRICES—Continued

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
BEANS (WAX)							
East fcy. cut 3 sieve 24/303							
Aug. 1	6.50-7.50	7.25-7.70	8.25-8.40	8.00-8.25	8.25	8.25	n.a.
Oct. 1	7.30-7.50	7.50-8.45	8.00-8.25	8.00-8.25	8.25	8.25	n.a.
Jan. 1	6.50-7.50	7.50-8.45	8.00-8.25	8.25	8.25	8.25	n.a.
April 1	6.75-7.50	8.00-8.45	8.00	8.25	8.25	n.a.	n.a.
BEANS LIMA (Fr. Gr.)							
East, fcy. Tiny gr. 24/303							
Oct. 1	10.00-11.35	10.00-11.50	10.35-10.75	10.75-11.50	11.00	11.00	12.25
Jan. 1	10.00-11.35	10.00-11.50	10.75	11.00	11.00	11.00	n.a.
Apr. 1	10.25-11.35	10.00-10.50	10.75-11.50	11.00	11.00	11.75	n.a.
July 1	10.00-11.35	10.00-10.50	10.75-11.50	11.00	11.00	12.25	n.a.
Midwest fcy., med. gr 24/303							
Oct. 1	9.25	9.00-9.25	9.00-9.75	9.50-9.75	9.25-9.75	9.75	12.00-14.00
Jan. 1	9.25	9.00-9.25	9.35-9.75	9.35-9.75	9.50-9.75	9.75	15.00-15.50
Apr. 1	9.25	9.50-9.75	9.35-9.75	9.25-9.75	9.50-9.75	9.75	15.50
July 1	9.00-9.25	9.50	9.25-9.75	9.25-9.75	9.50-9.75	9.35-10.50	n.a.
BEEETS							
East, fcy, diced, 24/303							
Oct. 1	6.25	6.60	6.60	6.75	7.25	7.25	7.25
Jan. 1	6.25	6.60	6.60	6.75	7.25	7.25	7.25
Apr. 1	6.25	6.60	7.00-7.25	7.00	7.25	6.75-7.25	n.a.
July 1	6.60	6.60	7.25	7.25	7.25	7.25	n.a.
Midwest fcy. sl. 24/303							
Oct. 1	6.15-6.40	6.35-6.85	7.00-7.25	7.25-7.35	7.35-8.00	7.75-8.00	8.25-8.75
Jan. 1	6.15-6.40	6.35-6.85	6.90-7.50	7.25-7.40	7.75-8.00	7.75-8.00	8.00-8.75
Apr. 1	6.15-6.35	6.40-6.75	7.00-7.50	7.40-7.75	7.75-8.00	7.00-8.00	8.25-8.75
July 1	6.25-6.85	6.50-7.25	7.25-8.25	7.40-8.25	7.75-8.15	8.00-8.50	n.a.
CARROTS							
Midwest fcy, diced, 24/303							
Oct. 1	6.50	6.50	6.50-6.60	6.50-7.00	6.50-6.75	6.50-7.25	7.75-8.00
Jan. 1	6.50-6.75	6.50	6.50-6.60	6.50	6.50-6.75	6.50-7.00	8.00-8.25
Apr. 1	6.50	6.50	6.50	6.50-6.75	6.50-7.25	6.50-7.00	8.00
July 1	6.50-7.50	6.50	6.50	6.50-6.75	6.75	7.25-7.75	n.a.
Midwest fcy. sl. 24/303							
Oct. 1	6.75	6.75-7.00	7.00-7.25	6.85-7.25	7.00-7.50	7.50-8.00	8.50-8.75
Jan. 1	6.75-7.25	6.75-7.00	7.00-7.25	7.00-7.50	7.25-7.50	7.25-7.75	8.50-8.75
Apr. 1	6.75-7.00	6.75-7.25	7.00-7.25	7.00-7.50	7.50-8.00	7.50-7.75	8.50-9.00
July 1	6.75-7.00	6.90-7.25	6.85-7.25	7.00-7.50	7.25-8.00	8.00-8.50	n.a.
CORN-SWEET (C.S. & W.K.)							
Midwest fcy., gold 24/303							
Sept. 1	8.00-8.50	8.25	8.15-8.25	6.25-7.15	7.25	7.25	9.25-9.50
Jan. 1	7.50-8.00	8.25	7.50-7.75	6.25-6.90	7.25-7.50	7.25	9.50
Apr. 1	7.25-7.75	8.25	6.75-7.25	6.50-6.75	7.50	7.25-7.50	9.50-9.75
July 1	8.00	8.25-8.50	6.75	7.00-7.25	7.50	7.00-7.50	n.a.
6/10							
Sept. 1	12.50-13.50	11.50-13.75	10.25-14.00	9.00-11.00	9.00-11.00	10.50-11.95	15.50-17.50
Jan. 1	12.50-14.00	12.00-13.95	9.95-12.25	8.50-11.00	9.50-11.00	11.00-12.75	19.00-20.50
Apr. 1	11.50-13.30	12.00-14.25	10.25	8.50-11.00	10.00-11.50	12.00-12.25	20.25-21.75
July 1	11.00-13.50	10.75-14.00	9.25-11.50	8.50-10.25	11.00-12.25	12.00-13.00	n.a.
East, fcy. gold 24/303							
Sept. 1	8.75-9.30	8.95-9.30	8.50-9.30	7.50-8.25	8.00	8.00	10.25-10.45
Jan. 1	8.40-9.30	8.25-9.30	8.00-8.50	7.50-8.00	8.00	8.00	10.35-10.60
Apr. 1	8.40-9.30	8.25-9.30	8.00	7.50	7.75-8.00	8.00	11.15
July 1	8.95-9.30	8.50-9.30	7.50-8.25	7.50	8.00	7.65-7.85	n.a.
PEAS, ALASKA							
Midwest fcy., 2 sv., 24/303							
July 1	8.00-8.50	8.25-8.75	9.50-9.75	10.00-10.25	8.50-9.00	8.75-9.25	10.25-10.75
Oct. 1	7.90-8.50	8.75-9.25	10.00	9.00-9.75	8.50-8.75	8.75-9.25	11.25-11.75
Jan. 1	7.90-8.50	9.25	10.00	9.00-9.25	8.75	8.75-9.25	11.50-11.75
Apr. 1	7.50-7.75	9.50	10.00	8.25-9.00	8.75-9.00	8.75-9.25	12.50
Midwest Ex. Std., 3 sv. 24/303							
July 1	6.75	7.50-7.75	8.75	8.50-8.75	7.00	7.50-7.75	9.00-9.50
Oct. 1	6.25-6.50	7.75-8.00	8.75	7.00-7.75	7.00	7.50-7.75	10.00-10.75
Jan. 1	6.50	8.00-8.25	8.75	7.00-7.75	7.25-7.50	7.50-7.75	10.75
Apr. 1	6.50	8.75	8.75	6.00-7.00	7.75-8.00	7.50-7.75	10.25
6/10							
July 1	10.20-10.25	10.75-11.00	13.00-13.25	12.75-13.50	9.25-9.75	9.00-9.75	12.75-13.50
Oct. 1	10.25	11.50-12.00	13.25-13.50	10.00-11.00	8.25-9.75	9.75-10.00	15.00-16.55
Jan. 1	10.25-10.50	13.00	13.50-13.75	9.75-10.25	9.00-9.75	10.25-10.50	17.50
Apr. 1	10.75	13.25	13.50-13.75	8.50-9.75	9.00-9.75	10.50-11.25	n.a.

CANNED FOOD PRICES—Continued

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
PEAS, SWEET							
Midwest Ung. fcy. 24/303							
July 1.....	6.75	7.75	8.75	8.50	7.25	8.00	9.50
Oct. 1.....	6.50	8.25	8.75	7.00	7.25	8.00	10.50
Jan. 1.....	6.75	8.50	8.75	7.00	7.50	8.00	10.50
Apr. 1.....	7.00-7.25	8.75	8.75	6.00	8.00	8.00	10.50
Midwest Ung. Ex. Std. 24/303							
July 1.....	6.40	7.25	8.50	8.25	6.75	7.25-7.50	8.75
Oct. 1.....	6.25	7.40	8.50	6.50	6.75	7.25	10.00
Jan. 1.....	5.95	8.00	8.50	6.50	7.00	7.25	10.00
Apr. 1.....	6.50	.....	8.50	5.75	7.50	7.25	10.00
6/10							
July 1.....	9.75	10.75	12.75	11.25	7.95	8.25-8.75	10.25-12.50
Oct. 1.....	10.25	11.50	12.75	9.50	7.95	9.00-9.25	15.00-16.50
Jan. 1.....	10.25	12.75	13.00	8.75	8.25	9.25	18.50
Apr. 1.....	10.75	.....	11.75	7.50	8.25	10.25	n.a.
SAUERKRAUT							
Midwest fcy., 24/2½							
Oct. 1.....	9.75-10.40	9.00-10.00	11.75-13.00	10.25-12.00	9.50-10.50	10.00-11.50	12.25-13.75
Jan. 1.....	9.75-10.25	10.00-11.00	11.50-12.75	10.25-12.25	9.50-11.00	10.00-12.75	12.25-13.50
Apr. 1.....	10.00-10.25	11.50-11.75	12.00-12.75	10.50-12.25	9.50-11.00	11.50-12.75	12.25-13.75
July 1.....	9.95-10.00	11.50-13.00	11.75-12.75	9.50-12.25	9.50-11.00	10.80-12.75	n.a.
6/10							
Oct. 1.....	8.25-9.00	7.50-8.25	9.75-10.50	8.50-9.50	8.25-3.50	9.00-9.75	11.00-12.00
Jan. 1.....	8.25-8.50	8.50-9.00	9.75-10.25	8.50-9.50	8.50-9.00	9.00-9.75	11.25-12.50
Apr. 1.....	8.25-8.50	9.50-10.50	9.75-10.00	9.50-10.50	9.00-9.50	9.50-9.75	11.75-13.25
July 1.....	7.95-8.25	9.75-11.00	9.25-10.00	7.75-9.50	9.00-9.50	9.45-10.75	n.a.
N.Y. fcy., 24/2½							
Oct. 1.....	9.50	9.50	13.00-13.50	10.50	10.50	10.00-12.75	n.a.
Jan. 1.....	9.50	13.00	13.00	10.50	9.50-12.25	10.00-12.75	n.a.
Apr. 1.....	9.50	14.50	13.00	10.50	9.50-12.25	10.00-12.75	n.a.
July 1.....	9.50	14.50	10.50	10.50	9.50-12.25	10.00-12.75	n.a.
SPINACH							
Ozarka, fcy., 24/303							
March 1....	7.45	7.80-8.10	8.10	9.60-9.95	9.60	9.60-9.95	9.60-9.95
June 1.....	7.80-8.10	7.80-8.10	8.60	9.60-9.95	9.60	9.60-9.95	9.60-9.95
Sept. 1.....	7.80-8.10	8.00-8.25	8.60	9.60-9.95	9.60	9.60-9.95	8.60-9.60
Jan. 1.....	7.80-8.10	8.80-8.60	8.95	9.60-9.95	9.60	9.60-9.95	8.60-9.60

SNYDER SALES SERVICE, INC.

750 PLEASANT ST.
BELMONT, MASS. 02178
617-484-8212

Offering the most complete canned foods
coverage in NEW ENGLAND



Contact: DAVID SNYDER
ROBERT SNYDER

Telex #92-1408
Fax 617 484-2279

CANNED FOOD PRICES—Continued

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
SWEET POTATOES							
East syr. wh., 24/3 sq.							
Oct. 1	15.00	14.50	15.50	15.50	15.00	15.00	15.00
Jan. 1	15.00	14.50	15.50	15.50	15.00	15.00	15.00
Apr. 1	14.50	14.50	n.a.	15.50	15.00	15.00	15.00
July 1	14.50	14.50	n.a.	15.00	15.00	15.00	n.a.
24/2½							
Oct. 1	16.50	16.00	17.00	17.00	17.00	17.00	17.00
Jan. 1	16.50	16.00	17.00	17.00	17.00	17.00	17.00
Apr. 1	16.00	16.00	17.00	17.00	17.00	17.00	17.00
July 1	16.00	16.00	17.00	17.00	17.00	17.00	n.a.
TOMATOES							
Midwest ex. std. 24/303							
Sept. 1	8.95	8.75	8.75	8.50	8.50	8.50	9.00
Jan. 1	8.75	8.75	8.75	8.50	8.25	8.50	9.50
Apr. 1	8.75	8.75	8.75	8.50	8.50	8.50	9.50
July 1	8.75	8.75	8.75	8.50	8.50	8.75	n.a.
24/2½							
Sept. 1	14.50	14.25	14.50	14.50	14.25	14.00	14.50-14.75
Jan. 1	14.25	14.50	14.50	14.25	14.00	14.00	16.00
Apr. 1	14.25	14.50	14.50	14.25	14.00	14.00	16.00
July 1	14.25	14.50	14.50	14.25	14.00	14.00	n.a.
6/10							
Sept. 1	12.75	13.00	12.75	11.75	11.50	11.00	11.50-12.00
Jan. 1	13.00	12.75	12.50	11.50	11.00	11.00	13.00
Apr. 1	13.00	12.75	12.50	11.50	11.00	11.00	13.50
July 1	13.00	12.75	12.50	11.50	11.00	11.00	n.a.
Calif. ex. std. 24/303							
Sept. 1 .....	.....	8.25-8.50	8.05-8.50	8.25-8.75	7.50	8.50	8.50
Jan. 1 .....	.....	8.75-9.00	7.80-8.25	8.00	7.75	8.50	n.a.
Apr. 1 .....	.....	8.50	8.25-8.50	8.00	8.50	8.50	n.a.
July 1 .....	.....	8.50-9.00	8.50-8.75	7.75-8.00	8.50	8.50	n.a.
Calif. Choice 6/10							
Sept. 1	13.80-14.69	13.25	12.75-13.75	9.75-11.00	8.50	11.00	n.a.
Jan. 1	13.80	13.25	12.00	10.00	9.00-9.50	11.00	n.a.
Apr. 1	13.25	13.75	12.00	9.50-10.00	10.50	11.00	n.a.
July 1	13.25	13.00-13.75	11.00	9.00	11.00	11.50	n.a.
Calif. Std. 24/303							
Sept. 1	8.88-9.60	7.75	7.25-8.25	7.50-8.00	7.00	8.00	8.00
Jan. 1	7.98-8.65	8.00	7.05-7.50	7.50	7.25	8.00	8.00
Apr. 1	7.50	7.75	7.50-7.75	7.50	8.00	8.00	8.00
July 1	7.50	7.24-7.85	8.00	7.25-7.50	8.00	8.00	n.a.
6/10							
Sept. 1	12.05-12.80	12.25	11.00	8.50-10.00	7.50	10.00	10.50
Jan. 1	12.80	12.25	11.00	9.00	8.00-8.50	10.00	11.50
Apr. 1	12.25	12.75	11.00	8.50-9.00	9.50	10.00	11.50
July 1	12.25	12.00-12.75	10.00	8.00	10.00	10.50	n.a.
TOMATO CATSUP							
Calif. fcy. 24/14 oz. gl.							
Sept. 1	11.50	11.50	11.50	.....	n.a.	² 10.30	² 10.30
Jan. 1	11.50	11.50	11.50	.....	n.a.	² 10.30	n.a.
Apr. 1	11.50	11.50	11.50	.....	² 10.30	² 10.30	n.a.
July 1	11.50	11.50	11.50	n.a.	² 10.30	² 10.30	n.a.
6/10							
Sept. 1	16.30-17.30	15.00	12.00-13.50	12.95-13.25	12.00	13.00	13.50
Jan. 1	17.05	15.00	11.50-12.00	12.50	13.00	13.00	14.00
Apr. 1	15.00	13.50	13.25-13.50	12.50	13.00	13.00	14.00
July 1	15.00	12.50-13.50	13.25-13.50	12.50	13.00	13.50	n.a.
Midwest, fcy. 24/14 oz.							
Sept. 1	10.00	9.75	9.75	9.75	9.75	9.75	10.00-10.25
Jan. 1	9.75	9.75	9.75	9.75	9.75	9.75	11.00
Apr. 1	9.75	9.75	9.75	9.75	9.75	9.75	11.00
July 1	9.75	9.75	9.75	9.75	9.75	9.75	n.a.
6/10							
Sept. 1	16.25	15.00	14.25	13.25	12.75	12.75	13.25-14.00
Jan. 1	15.25	14.75	14.00	12.50-13.25	12.75	12.75	16.50
Apr. 1	15.25	14.75	14.00	13.25	12.75	12.75	16.50
July 1	15.25	14.75	14.00	13.25	12.75	12.75	n.a.

²East.

CANNED FOOD PRICES—Continued

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
TOMATO PASTE							
Calif. Fey. 96/6z							
Sept. 1	24.54-25.50	25.50-26.50	23.50-24.60	23.50-25.00	22.00-23.00	23.00	24.00
Jan. 1	23.54-24.50	26.50	23.50-25.00	23.00	22.00-23.00	23.00	24.00
Apr. 1	24.50	25.06-26.50	23.08-25.00	23.00	23.00	23.00	24.00
July 1	24.50	24.50-26.50	23.00-25.00	22.00-23.00	23.00	24.00	n.a.
6/10-26%							
Sept. 1	22.00-24.00	24.10	19.00-21.00	17.50-18.00	17.00-18.00	18.00	19.00
Jan. 1	24.05-24.10	24.10	18.00-19.00	17.00-18.00	17.00-18.00	18.00	19.00
Apr. 1	24.10	23.10	19.00	17.00-18.00	17.50-18.00	18.00	19.00
July 1	24.10	21.00-23.10	18.00-19.00	17.00-18.00	18.00	19.00	n.a.
TOMATO PUREE							
Calif. Fey. 1.06 24/303							
Sept. 1	10.40	10.05	10.00	.....	*13.85	n.a.	n.a.
Jan. 1	9.80	10.30	10.00	.....	*13.85	n.a.	n.a.
Apr. 1	9.80	10.30	10.50	.....	*13.85	n.a.	n.a.
July 1	9.80	10.30	10.50	*13.85	n.a.	n.a.	n.a.
6/10							
Sept. 1	13.50-14.90	13.75	11.50-12.50	11.00-11.75	10.25-11.25	11.25	11.50
Jan. 1	14.65-14.90	13.75	11.25	11.25	10.25-11.25	11.25	12.00
Apr. 1	13.75	13.25-13.75	11.75	11.25	11.00-11.25	11.25	12.00
July 1	13.75	13.00-13.75	11.25-11.75	11.25	11.25	11.25	n.a.
TOMATO JUICE							
Midwest fey. 12/46 oz.							
Sept. 1	n.a.	8.00	8.75	7.50	8.00	8.25-9.00	n.a.
Jan. 1	n.a.	7.50	7.50	7.25	8.00	9.00	8.75-9.45
Apr. 1	n.a.	8.25	8.25	7.50	8.25	9.00	9.45-9.75
July 1	n.a.	8.25	8.25	8.00	8.25	n.a.	n.a.
Calif. fey. 12/46 oz.							
Sept. 1	7.88-8.00	8.00-8.25	7.77-7.80	7.50	7.25-7.75	8.00	n.a.
Jan. 1	7.52-8.00	8.25	7.75	7.75	7.75	8.00	n.a.
Apr. 1	7.75	7.77-8.25	7.75	7.75	8.00-8.25	8.00	n.a.
July 1	7.75	8.25-8.40	7.75	7.25-7.75	7.75-8.00	n.a.	n.a.

FRUITS

APRICOTS

Calif. choice hy. syr.

halves 24/2½

July 1	20.55-21.05	21.55	22.75-23.95	21.95	21.95	24.15	24.75
Oct. 1	21.05	23.00	22.75-23.95	20.75-21.95	24.15	24.15	24.75
Jan. 1	21.05	23.25	23.95	21.95	24.15	24.15	24.75
Apr. 1	21.05	23.25-23.95	23.95	21.95	24.15	24.75	24.75
6/10							
July 1	20.55	21.25	22.25-23.00	21.00	20.00	23.00	23.00
Oct. 1	20.50	22.00	22.25-23.00	20.00-21.00	23.00	23.00	23.00
Jan. 1	20.50-20.65	22.50	23.00	20.00	23.00	23.00	23.00
Apr. 1	20.50	22.50-23.00	23.00	20.00	23.00-24.00	23.00	23.00

FRUIT COCKTAIL

Calif. choice hy. syr.

24/2½

Sept. 1	n.a.	18.85	19.00-20.25	19.90-21.10	19.75-21.10	21.10	21.10
Jan. 1	n.a.	19.25-19.50	21.10	21.10	20.25-21.10	21.10	21.10
Apr. 1	n.a.	19.50-20.25	21.10	19.50-21.10	20.40-21.10	21.10	21.10
July 1	n.a.	19.05-20.25	21.10	19.75-21.10	21.10	21.10	n.a.
6/10							
Sept. 1	n.a.	17.00	17.75-18.50	18.75-19.75	17.75	18.25	19.25
Jan. 1	n.a.	17.50-18.00	19.25	18.50-18.75	17.75	18.25-18.75	19.25
Apr. 1	n.a.	18.00-18.50	19.75	17.75-18.75	17.75	19.25	19.25
July 1	n.a.	17.75-18.50	18.75-19.75	17.75	18.25	19.25	n.a.

¹East ⁴No. 2½.

CANNED FOOD PRICES—Continued

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
PEACHES							
Calif., ch. cling hy. syr.							
24/2½							
Sept. 1	14.40-15.60	16.20	16.40-17.60	17.25-17.95	18.45	18.45	18.45
Jan. 1	14.60-15.60	16.85	18.45	17.95-19.25	18.45	18.45	18.45
Apr. 1	15.10	16.85-17.60	18.45	17.50-18.45	18.45	18.45	18.45
July 1	15.60	17.60	17.95-18.45	17.50-18.45	18.75	18.45	n.a.
6/10							
Sept. 1	12.50-14.50	15.50	16.25-17.00	17.00-17.25	13.75-14.75	16.25	17.00
Jan. 1	13.00-14.50	16.50	17.75	15.20-15.75	14.75	16.75	17.00
Apr. 1	13.50	16.50-17.00	18.25	14.75-15.00	14.75	16.75	17.00
July 1	14.25	17.00	18.00-18.25	14.75-15.00	16.25	17.00	n.a.
Calif. Frees. fcy. hy. syr.							
24/2½							
Sept. 1	14.80-16.25	16.45	16.25-17.45	18.00-19.20	19.20	19.20	19.20
Jan. 1	14.80-16.25	16.70	19.20	19.20	19.20-19.50	19.20	19.20
Apr. 1	15.35	16.70	19.20	19.20	19.20-19.50	19.20	19.20
July 1	15.85	17.45	19.20	19.20	19.50	19.20	n.a.
6/10							
Sept. 1	14.30-15.55	15.30-15.80	16.05-16.80	17.05-18.05	16.05-17.05	17.05	17.05
Jan. 1	14.40-15.55	16.30	17.55	17.80-18.05	17.05	17.05	17.05
Apr. 1	14.80	16.30-16.80	18.05	17.80-18.05	17.05	17.05	17.05
July 1 .....	.....	16.80	17.80-18.05	17.05	17.05	17.05	n.a.
PEARS							
Calif. Bart ch. hy. syr.							
24/2½							
Sept. 1	15.00-16.50	15.75-16.85	18.60-19.35	20.00-20.60	18.50-19.75	18.75	18.75-19.00
Jan. 1	15.00-15.25	18.35-18.60	20.20	18.75-19.25	18.50-19.75	18.75	18.95-19.00
Apr. 1	15.25-15.75	18.60-19.35	20.20	18.75-19.75	19.25-20.25	18.75	18.95-19.00
July 1	15.75-16.25	19.35	20.00-20.60	18.75	20.25	18.75-19.00	n.a.
Choice 6/10							
Sept. 1	13.00-13.75	13.60-15.25	15.50-16.25	19.00	14.50-15.25	16.65	16.50
Jan. 1	13.00-14.00	15.25-15.70	17.75	19.00	15.75	14.75	17.00
Apr. 1	13.50-14.50	15.75-16.25	18.25	17.00-17.25	15.75	14.75	17.00
July 1	13.50-14.50	16.25	19.00	15.75	15.75	16.50	n.a.

¹Choice.

THE ALMANAC

OF THE CANNING FREEZING PRESERVING INDUSTRIES

Section XI

APPENDIX

INDEX

REFERENCES IN THIS SECTION

CASE SHIPPING WEIGHTS....	635, 636
CENSUS OF MANUFACTURERS...	597, 646
CONVERSION FACTORS	633, 634
EXPENDITURES	
Meals & Snacks.....	644
Food Off-Premise Use	644
FARM WEIGHT EQUIVALENTS...	633, 634
FOODSERVICE ANALYSIS	
Foodservice Establishments.....	645
Foodservice Sales	645
GOVT. PURCHASES, CANNED...	637, 638
GOVT. PURCHASES, FROZEN.....	639
METRIC EQUIVALENTS.....	632

PER CAPITA CONSUMPTION.....	640
Fruit Juices.....	640
Fruits, Canned.....	641
Fruits, Frozen	642
Fishery Products.....	642

PER CAPITA UTILIZATION	
Vegetables, Canned	643
Vegetables, Fresh	643
Vegetables, Frozen.....	643
PROCESSED WEIGHT EQUIV....	633, 634

REFERENCES IN OTHER SECTIONS

Can & Glass Container Shipments ...	167
Can Prices	165, 166
Census of Manufacturers.....	597
Conversion Factors—can/glass	162
Conversion Factors—case.....	163
Conversion Factors—metric	632
Tin Plate Coating Weights	164

METRIC SYSTEM EQUIVALENTS (SELECTED)

(Source: U.S. Department of Commerce, National Bureau of Standards,
Misc. Pub. 286; Courtesy National Canners Assn. Div. of International Trade)

UNITS OF CAPACITY, OR VOLUME

1 Bushel (U.S.)	=	=	35.239 07L
1 Cubic Foot	=	=	28.316 85L
1 Gallon (U.S. liquid)	=	128 fl oz	3.785 411 784 liters exactly
1 Quart (U.S. liquid)	=	32 fl oz	0.946 352 946 liter exactly
1 Pint (U.S. liquid)	=	16 fl oz	0.473 176 473 liter exactly
1 Fluid Ounce	=	=	0.029 573 53 liter
		=	2.957 353 cL*
		=	29.573 53 mL*
1 Hectoliter	=	100 liters	26.417 205 2 gallons
		=	105.668 82 quarts
1 Liter	=	1,000 mL*	.264 172 052 gallon
		100 cL*	1.056 688 2 quarts
		=	83.814 02 fl oz
1 Centiliter	=	.01 liter	0.338 140 2 fl oz
1 Milliliter	=	.001 liter	0.033 814 02 fl oz

UNITS OF MASS

1 Long Ton	=	2,240 lbs.	=	1,016.046 908 8 kg exactly
1 Short Ton	=	2,000 lbs.	=	907.184 74 kg exactly
1 Cental (cwt)	=	100 lbs.	=	45.359 237 kg exactly
1 Pound (lb)	=	16 oz.	=	453.592 37 g (exactly)
1 Ounce (oz.)	=	=	=	28.349 523 125 g (exactly)
1 Metric Ton	=	1,000 kg	=	0.984 206 5 Long Ton
			=	1.102 311 3 Short Tons
			=	2,204.623 lbs.
1 Kilogram	=	1,000 g	=	2.204 623 lbs.
			=	35.273 96 oz.
1 Gram	=	=	=	0.035 273 96 oz.
1 Grain	=	=	=	64.798 91 mg

UNITS OF LENGTH

1 Mile	=	5,280 feet	=	1,609.344 meters exactly
		1,760 yards	=	1.609 344 km exactly
1 Yard	=	3 feet	=	0.914 4 meter exactly
		36 inches	=	91.44 cm exactly
1 Foot	=	12 inches	=	0.304 8 meter exactly
			=	30.48 cm exactly
1 Inch	=	1.0 inch	=	2.54 cm exactly
1 Kilometer	=	1,000 m	=	0.621 37 mile
1 Meter	=	100 cm	=	1.093 613 yards
			=	3.280 840 feet
			=	39.370 08 inches
1 Centimeter	=	10 mm	=	0.393 700 8 inch
		.01 m	=	
1 Millimeter	=	.001 m	=	0.039 370 08 inch

UNITS OF AREA

1 acre	=	=	0.404 685 642 24 ha exactly
1 hectar	=	=	2.471 054 acres
1 square yard	=	=	0.836 127 4m ²
1 square foot	=	=	0.092 903 04m ²
1 square inch	=	=	6.451 6 cm ²

TEMPERATURE CONVERSION

$$\text{Temp C} = (\text{Temp F} - 32) \div 1.8$$

$$240^{\circ}\text{ F} = 116^{\circ}\text{ C}$$

$$0^{\circ}\text{ F} = -18^{\circ}\text{ C}$$

$$\text{Temp F} = 1.8 (\text{Temp C}) + 32$$

$$110^{\circ}\text{ C} = 230^{\circ}\text{ F}$$

$$0^{\circ}\text{ C} = 32^{\circ}\text{ F}$$

*May appear as "ml" in other countries.

FARM AND PROCESSED WEIGHT EQUIVALENTS

Source: Economics, Statistics, and Cooperatives Service, U.S. Dept. of Agriculture

NOTE: Relationships between farm and processed weights for most commodities vary widely from season to season and between localities. Factors shown in this table represent average relationships for all producing areas.

CANNED VEGETABLES	Pounds farm weight		Pounds canned from pounds farm weight	Cases canned per ton farm weight ¹			Cases 24/303's from pounds canned	Net weight per case* 24/303's
	From pounds canned	From case of 24/303's		24/303's	24/2½'s	6/10's		
	Pounds			Cases			Pounds	
Asparagus	1.220	28.57	0.819	70	39.5	43.2	.0427	23.4
Lima beans ²	.625	15.38	1.599	130	73.4	80.2	.0407	24.6
Snap beans	.712	16.67	1.404	120	67.8	74.1	.0427	23.4
Beets	1.290	31.75	.755	63	35.6	38.9	.0407	24.6
Carrots	1.333	32.79	.750	61	34.5	37.7	.0407	24.6
Corn:								
Cream style	2.033	50.00	.492	40	22.6	24.7	.0407	24.6
Whole grain	2.538	62.50	.394	32	18.1	19.8	.0407	24.6
Mushrooms	1.403	34.48	.713	58	32.8	35.8	.0407	24.6
Okra	1.030	24.10	.971	83	46.9	51.2	.0427	23.4
Peas ²	.739	18.18	1.353	110	62.1	67.9	.0407	24.6
Pimientos	2.410	57.14	.415	24	19.8	21.6	.0422	23.7
Potatoes, white	1.572	37.74	.636	77	29.9	28.7	.0417	24.0
Pumpkin and squash ...	2.710	66.67	.369	33	16.9	18.5	.0407	24.6
Sauerkraut	1.859	43.48	.538	46	26.0	28.4	.0427	23.4
Spinach	.901	20.00	1.110	100	56.5	61.7	.0450	22.2
Sweetpotatoes	1.292	30.77	.784	65	36.7	40.1	.0420	23.8
Tomatoes	1.553	36.36	.644	55	31.1	34.0	.0427	23.4
Tomato catsup ³	2.457	66.67	.407	30	17.1	18.6	.0369	27.1
Tomato juice	1.527	36.36	.655	55	31.1	34.0	.0420	23.8
Tomato paste ³	5.432	142.86	.184	14	8.0	8.7	.0380	26.3
Tomato puree ⁴	3.247	80.00	.308	25	14.2	15.5	.0407	24.6
Pickles	.744	17.86	1.344	112	63.8	69.4	.0416	30.0

¹Basic figure is yield of 24/303's per ton. One case 24/303's is equivalent to 0.57 cases 24/2½'s and 0.62 cases 6/10's. ²Shelled basis. ³33 percent solids. ⁴11 percent solids.

CANNED FRUITS	Pounds farm weight		Pounds canned from pounds farm weight	Cases canned per ton farm weight ¹			Cases 24/2½'s from pounds canned	Net weight per case ² 24/2½'s
	From pounds canned	From case of 24/2½'s		24/303's	24/2½'s	6/10's		
	Pounds			Cases			Pounds	
Citrus salad	2.096	91.32	0.477	38.8	21.9	23.8	0.02299	43.5
Grapefruit sections	2.020	87.72	.495	40.3	22.8	24.8	.02299	43.5
Orange sections	2.222	96.62	.450	36.6	20.7	22.5	.02299	43.5
Apples	1.859	72.46	.538	48.6	27.6	30.0	.02564	39.0
Applesauce	1.250	53.90	.800	65.6	37.1	40.5	.02299	43.5
Apricots	.694	31.25	1.440	113.3	64.0	69.9	.02222	45.0
Berries:								
Blackberries	.646	28.09	1.549	125.0	71.2	77.5	.02299	43.5
Blueberries	.836	36.36	1.196	97.4	55.0	60.1	.02299	43.5
Boysenberries	.694	29.24	1.440	120.0	68.4	74.4	.02299	43.5
Gooseberries	.595	25.06	1.680	140.0	79.8	86.8	.02299	43.5
Loganberries	.654	29.24	1.530	120.0	68.4	74.4	.02299	43.5
Raspberries	.641	26.99	1.560	130.0	74.1	80.6	.02299	43.5
Strawberries	.725	30.49	1.380	115.0	65.6	71.3	.02299	43.5
Cherries:								
Red tart-pitted	1.055	45.87	.948	76.8	43.6	47.4	.02299	43.5
Sweet-pitted	1.022	44.44	.979	79.6	45.0	49.0	.02299	43.5
Sweet-untipped	.707	30.77	1.414	115.0	65.0	70.8	.02299	43.5
Cranberries	.388	16.31	2.580	*215.0	122.6	133.3	.02083	48.0
Figs	.654	29.41	1.530	120.4	68.0	74.1	.02222	45.0
Fruit cocktail	.899	40.00	1.125	88.5	50.0	54.5	.02222	45.0
Fruits for salad	.899	40.00	1.125	88.5	50.0	54.5	.02222	45.0
Olives ³	.945	25.51	1.058	138.6	78.4	85.4	.03704	27.0
Peaches:								
Clingstone	.836	36.36	1.196	97.4	55.0	60.1	.02299	43.5
Freestone	1.022	44.44	.979	79.6	45.0	49.0	.02299	43.5
Pears	1.000	43.48	1.000	81.4	46.0	50.1	.02299	43.5
Pineapple	1.709	76.92	.585	46.0	26.0	28.3	.02222	45.0
Plums, fresh	.663	29.85	1.508	118.6	67.0	73.0	.02222	45.0

¹Basic figure is 24/2's for citrus; 24/303's for applesauce and berries; 6/10's for apple slices and red tart cherries; 24/300's for cranberries; and 24/2½'s for other products. ²Basis 24 cases of No. 300's. ³Drained weight. ⁴Actual weight of food inside the cans, including packing medium, if any.

FARM AND PROCESSED WEIGHT EQUIVALENTS—CONTINUED

FRUIT JUICES	Approximate brix	Equivalent farm weight per gallon	Gallons per unit of farm weight		Net weight per gallon
	Degrees	Pounds	Box ¹	Ton	Pounds
Apple:					
Single strength	13	12	n.a.	170	8.8
Frozen 3 to 1 concentrate	45	47	n.a.	43	10.0
Citrus fruits: ²					
Orange					
Single strength juice	12	16	5.5	122	8.7
Frozen concentrate	45	69	1.3	29	10.0
Grapefruit					
Single strength juice	10	18	4.7	110	8.7
Frozen concentrate	40	83	1.0	24	9.8
Lemon					
Single strength juice	(³)	26	2.9	76	n.a.
Nonfrozen concentrate	(³)	112	.7	17.9	n.a.
Concentrate for lemonade	(³)	18	4.2	110	n.a.
Grape:					
Single strength	16	11	n.a.	175	8.9
Frozen concentrate	50	40	n.a.	50	10.3
Pineapple:					
Single strength	14	15	n.a.	133	8.8
4 to 1 concentrate	61	75	n.a.	27	10.8
3 to 1 concentrate	50	60	n.a.	33	10.3
Prune (from fresh prunes):					
Single strength	31	13	n.a.	155	9.4
1 1/2 to 1 concentrate	73	32	n.a.	62	11.4

n.a. - Not available. ¹Oranges, 90 pounds; grapefruit, 85 pounds; lemons, 76 pounds. ²Orange and grapefruit products based on Florida yields; lemons on California. ³Lemon product yields are based on a standard ton containing 36.6 pounds of anhydrous citric acid.

Factors for converting to				Factors for converting to			
FROZEN FRUITS	% recovery	Farm weight from frozen weight ¹	Frozen weight from farm weight ¹	FROZEN VEGETABLES	% recovery	Farm weight from frozen weight ¹	Frozen weight from farm weight ¹
Apples	60	1.67	0.60	Asparagus	52	1.92	.52
Apricots	78	1.10	.91	Lima beans (shelled) ..	95	1.05	.95
Berries				Snap beans	85	1.18	.85
Blackberries	95	1.05	.95	Broccoli	75	1.33	.75
Blueberries	97	1.03	.97	Brussels sprouts	75	1.23	.75
Boysenberries	88	1.14	.88	Cauliflower	70	1.43	.70
Gooseberries	97	1.03	.97	Corn, cut	27	3.70	.27
Loganberries	88	1.14	.88	Carrots	55	1.82	.55
Raspberries	95	1.05	.95	Okra	85	1.18	.85
Strawberries	93	.89	1.12	Peas, green (shelled) ..	92	1.09	.92
Cherries, sour	75	1.11	.90	Peas, southern	50	2.00	.50
Cherries, sweet	85	1.18	.85	Potatoes, white	40	2.50	.40
Grapes	85	1.18	.85	Peppers, sweet	70	1.43	.70
Peaches	67	1.25	.80	Spinach	70	1.43	.70
Pineapples	50	1.60	.25	Other greens	75	1.33	.75
Prunes	85	1.18	.85	Squash	55	1.82	.55
				Sweetpotatoes	50	2.00	.50

¹Frozen weight is weight of frozen fruit plus sugar content. Fruit to sugar ratio used in this computation: Apricots 6 to 1; Strawberries, sour Cherries, Peaches 5 to 1; Pineapples 4 to 1; other fruits 0. Ratio does not apply to vegetables.

APPROXIMATE CASE SHIPPING WEIGHTS—POUNDS* (Corrugated Fibre Cases Unless Otherwise Specified)

FRUITS	24/8	36/8	24/1T	24/303	24/2	24/2½	48/8	48/1T	6/10
Apples, sl.	..	..	..	..	..	..	..	..	45
Apple Sauce¹	16	..	..	30	..	53	33	..	47
Cherries, Dk. Sw. Unpt.	17	..	..	32	..	..	..	..	49
Cherries, Royal Anne	17	..	..	31	..	..	..	..	49
Cherries, R.S.P.	..	..	..	30	..	..	..	..	45
Crabapples, gl. (Mich.)	..	..	..	40	..	³32	..	..	⁴47
Figs, Kodota, W.C.	..	..	..	..	..	..	..	..	48
Fruit Pie Filling⁴	..	..	..	..	..	..	..	..	..
Grape Fr. or Citrus Salad⁵ ...	16½	..	..	30½	..	..	33	..	..
Peaches, Spiced, W.C.	..	..	..	..	..	55	..	..	48
Pineapple⁶	..	..	..	..	..	..	..	..	..
Plums, (Mich.)	17	..	..	31	..	53	..	..	48
Other West Coast Fruits									
Fcy-ex. heavy sirup	17	..	32	32	39	54	34	63	48
Choice-heavy sirup	17	..	31	31	38	53	33	63	47
Std. light sirup	16	25	30	30	37	52	32	61	46
Water	16	25	30	30	36	51	32	60	45
Seconds	..	..	..	..	..	52	..	..	46
Jams⁷, Jellies¹⁰, Preserves¹¹ ..	..	..	..	..	..	..	..	..	..

*Weights vary slightly according to local and individual canner practice.

¹12/35 oz. glass-37; 24/15 oz. glass-34. ²12/2½. ³Tin. ⁴12/2½-20; W.C.—West Coast. ⁵12/46 oz.-45½. ⁶Picked peaches (Georgia) 12/2½ gl.-34. ⁷Whole spiced Kieffer. ⁸24/2 cr., sl., chunks-38; 24/2½ sl.-54; chunks-56; 48/8 crushed-34; 24/303 crushed-32; 48/1F sliced-35 (W.C. 33); No. 10: crushed in juice (PR) 47, (H) 46, in syrup 49; sliced, fcy or choice, W.C. 49, East & South in ex. hvy. Syrup, South & East, fcy 48, choice 47, in juice or water 47; chunks fcy W.C. 49, in syrup (H) 47, (P.R.) 48, in juice or water 46; med. or coarse cut in juice or water 47; Tidbits, fcy W.C. 48, East & South in syrup 47, in juice 46. ⁹6/10-59. ¹⁰12/10 oz.-12, 12/20 oz.-24. ¹¹12/12 oz.-15, 12/18 oz.-22.

JUICES	48/6	24/303	24/2	12/29	12/32	12/46	6/10
Apple W.C.	..	..	..	30	..	..	..
Citrus	25	..	36	29	..	44	..
Pineapple	..	..	37	..	..	44	45-46
Pineapple blends	..	..	..	29	..	44	..
Tomato	⁴25½	28	36	..	..	43-44	45

⁴48/5½ oz.-23; 72/8 oz.-47; 24/300-27½; 48/300-54.

VEGETABLES	24/8	48/8	24/12 Vac.	24/Pic.	48/Pic.	24/300	24/303	24/2½	6/10
Asparagus, W.C.	16½	32	..	20	40	28	..	..	46
Asparagus, Other	17	..	..	20	..	28	..	..	46
Beans, gr. or wax	17	33	..	..	..	..	30	53	46
Beans, Blue Lake	..	..	..	..	..	..	30	..	45½
Beans, Lima	16	33	..	..	..	..	30	..	46½
Beans, Lima, Fordhook	..	..	..	..	..	..	29	..	..
Beets¹	17	33	..	..	..	..	30	..	47
Carrots²	17	33	..	..	..	..	31	..	46
Corn, c.s. or w.k.³	17	33	25	..	..	..	31	..	47
Kraut	17	..	..	..	..	..	30	51	45
Peas	17	33	..	..	..	..	31	..	47
Peas & Carrots	17	..	..	..	..	..	31	..	46
Pimentos⁴	..	..	..	..	..	..	..	..	..
Potatoes, Wh.	..	..	..	..	..	..	30	..	48
Pumpkin	..	..	..	..	..	..	31	54	46
Pumpkin Pie Mix	..	..	..	..	..	..	33	..	..
Spinach⁵	..	..	..	..	40	..	29	49	48
Succotaash, c.s. or w.k.	16	..	..	..	..	..	31	..	47
Tomatoes⁶	..	..	..	..	..	..	30	52	45
Tom. Puree 1.045	15	..	..	..	..	..	..	..	46
Tom. Puree 1.06	..	..	..	..	..	..	..	..	46
Tom. Puree 1.07	..	..	..	..	..	..	..	..	47
Tom. Paste 26%	..	..	..	..	..	..	..	..	48
Tom. Paste 30%	..	..	..	..	..	..	..	..	47½
Tom. Sauce⁷	..	..	..	..	..	..	..	..	48
Turnip Greens⁸	..	33	..	..	..	..	30	50	48
Vegetables, Mixed	17	33	..	..	..	..	31	..	47

W.C.—West Coast. ¹Harvard or Pickled, glass 12/16-22. ²12/16 oz. glass-21. ³12/404 (12T) on cob-26. ⁴Whole (Tin) 24/4 oz.-9½; 24/7 oz.-14; 48/7 oz.-28; 24/2½ oz.-13; 24/7 oz.-20. ⁵West Coast—24/8-15½; 24/303-29½; 24/2½-50; 48/pic-38½; 6/10-43½. ⁶24/303 Stewed tom.-30. W.C.—24/303-29½; 24/2½-51½; 6/10-43; 24/1 Tom. aspic-21. ⁷72/8 oz.-44. ⁸24/2-35.

APPROXIMATE CASE SHIPPING WEIGHTS—CONTINUED

PICKLES	24/8	12/12	24/12	12/16	24/16	12/22	12/32	6/10	6/64	4/Gal
Fresh Pack Dill	..	..	..	..	..	..	38	..	..	..
Fresh Polish Dill	..	..	..	..	..	..	38	..	..	..
Fresh Pack Kosher Dill	..	..	..	..	..	..	..	38	..	..
Fresh Cucumber Chips	..	..	..	22	..	..	..	..	..	..
Sweet	..	18	..	21	..	29	40	..	..	..
Sweet Gherkins	26	19	..	..	..	..	..	51	..	..
Sweet Chips	..	19	..	..	..	32	..	51	..	..
Sweet Mixed	..	19	..	..	..	31	..	..	..	..
Dill	..	17	..	20	..	28	38	..	..	46
Dill Hamburger Slices	..	17	..	..	..	28	38	46	..	48
Kosher Dill	..	17	..	20	..	28	38	..	..	..
Sour	..	17	..	..	..	28	..	..	..	..
Sweet Relish	26	18	..	21	..	29	..	52	..	50

SPECIALTIES	12/12	24/12	24/14	12/20	24/20	6/10
Catsup, fancy	..	..	37	39	49	50
Catsup, ex. Std.	..	..	39	..	48	48½
Chili Sauce	16½-17	..	..	..	..	49

	24/8	48/8	24/300	48/1	48/300	24/2	24/2½	6/10
Beans, Tom/Sauce	..	32	..	..	58	38	54	48
Beans, butter	16	..	27½	..	..	..	..	..
Beans, Dark Kid.	16	31	28	..	..	..	..	47
Beans, Lgt. Kid.	..	31	28	..	..	..	..	48
Beans, Other, Kid.	14	..	27½	..	..	..	..	48
Chili Con Carne w/beans	16	..	29	..	..	..	..	..
Chili Con Carne, Plain	15	..	28	..	..	..	..	..
Hominy	..	..	28	..	56	37	53	46
Pork & Beans	..	31	..	41	57	38	55	48
Spaghetti in Tom. Sauce	16	..	..	..	..	..	..	..

FISH	48/1/2	48/1T	24/1 oval	48/1 oval	100/1/4
Salmon	33	62	..	..	..
Sardines	..	..	30	61	37
Tuna, fcy.	28	..	..	..	..
Tuna, Grated	26	..	..	..	..

Twelfth Biennial Edition

THE 1988-89 DIRECTORY OF THE CANNING, FREEZING, PRESERVING INDUSTRIES

FOR FOOD BUYERS, The Directory is the ideal source book. It's the easy way to find basic food products, to find new products to spruce up your menu and to fill out your product line. This well-organized, easy to use directory will give you more detail about each company than any other directory. All of the information that you need to do business intelligently and efficiently with the packer is here. \$110 each

By the Publishers of THE ALMANAC

Edward E. Judge & Sons, Inc.

P.O. Box 866, Westminster, MD 21157 USA (301) 876-2052



GOVERNMENT PURCHASES—SPECIFIED CANNED FOODS **MILITARY**

Source: Fr. & Veg. Br., Contr. & Prod. Div., Dir. of Subsistence, Defense Personnel Support Center

PACK YEAR	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
CANNED VEGETABLES—Thousands of Cases, Equiv. 24/303										
Asparagus.....	19.1	26.8	.....	37.8	23.3	43.2	21.4	18.3	11.1	27.9
Beans, Gr. & Wax .	367.0	450.7	340.4	357.7	421.7	263.9	399.3	233.1	305.5	154.2
Beans, Lima	74.8	91.5	91.9	72.7	81.7	55.1	73.1	32.5	37.0	73.5
Bean Sprouts	51.9	80.6	75.4	51.3	24.2	65.4	62.7	20.2	51.7	70.2
Beets.....	191.0	122.4	86.5	108.9	152.1	138.0	78.6	72.9	80.0	115.9
Carrots	125.0	107.5	95.2	118.2	132.9	114.8	109.6	272.2	136.2	158.2
Catsup	442.4	499.0	471.9	342.3	525.9	384.9	428.7	402.7	467.8	462.6
Chili Sauce.....	28.2	26.8	15.6	44.1	26.3	27.5	24.6	8.0	6.4	12.9
Corn	465.1	402.2	488.2	389.9	278.1	423.7	263.2	357.5	420.4	462.9
Mushrooms	83.8	90.5	113.8	98.7	57.6	63.5	81.1	101.6	98.4	176.0
Peas.....	211.3	201.9	191.2	159.4	226.3	240.8	162.3	83.4	141.0	167.4
Pimientos.....	38.8	27.5	17.6	31.3	17.5	18.2	30.7	.....	.....	.....
Potatoes, Sweet...	107.1	155.4	173.5	124.8	120.4	162.1	113.4	75.2	172.2	99.2
Pumpkin & Squash	17.0	7.4	10.0	10.4	12.7	15.9	11.7	10.5	9.9	13.9
Sauerkraut.....	52.0	64.0	82.5	40.9	59.3	60.8	33.6	15.6	42.4	42.2
Spinach.....	101.6	57.2	36.9	32.2	62.7	25.1	58.4	42.6	26.0	48.1
Tomatoes	518.4	532.6	583.8	425.3	676.5	517.1	576.2	545.1	550.3	555.4
Tomato Paste....	89.2	129.6	129.9	118.8	149.4	197.2	154.7	56.5	177.5	163.8
Total these items..	2,983.9	3,073.4	3,004.3	2,564.7	3,048.6	2,818.2	2,684.0	2,347.9	2,733.8	2,804.3

CANNED FRUITS—Thousands of Cases, Equiv. 24/2½

Apples	37.6	29.9	29.3	30.6	22.1	0	33.7	19.0	12.6	11.3
Applesauce	86.3	89.7	54.9	84.9	37.1	56.9	47.6	64.2	56.4	71.2
Apricots	57.8	62.6	20.8	28.6	5.7	4.5	34.5	13.2	20.3	23.5
Blackberries .....	.....	7.2	.....	2.3	0	0	.....	.....	.....	.....
Blueberries .....	.....	.....	.....	0.0	0	0	.....	3.2	4.4	5.5
Cherries, RSP....	30.6	7.9	.....	0.0	0	0	9.1	1.7	.8	32.0
Cherries, Sweet...	11.6	12.7	6.3	5.9	6.8	4.8	8.3	.....	.8	1.1
Cranberry sauce .	39.2	56.2	33.0	37.8	48.4	33.6	38.2	22.9	19.8	25.1
Figs.....	1.2	3.1	2.3	1.4	0	.....	.....	.....	.....	.....
Fruit cocktail ...	124.0	174.1	135.0	110.8	152.1	145.9	169.2	168.6	68.9	157.7
Grapefruit	19.7	30.9	25.9	32.3	13.9	12.4	19.3	4.0	.....	19.5
Olives	37.4	66.8	39.7	0.0	0	22.8	84.9	68.2	103.7	101.4
Peaches	251.5	271.1	148.6	142.5	138.2	116.2	162.1	135.0	95.5	149.4
Pears.....	119.6	147.0	105.3	58.4	120.2	74.1	71.9	94.8	50.7	80.9
Pineapple.....	134.1	208.9	252.7	91.1	137.1	132.9	156.4	138.2	64.8	65.6
Plums (all).....	13.9	22.7	7.4	5.8	11.7	7.6	10.5	4.8	1.3	7.3
Prunes	1.0	1.0	1.2	0.0	0	0	.....	.....	.9	.....
Total these items .	965.6	1,191.8	862.4	643.4	693.3	611.7	845.7	737.8	500.9	751.5

CANNED JUICES—Thousands of Cases, Equiv. 24/2

Apple Juice	231.3	287.7	272.9	207.9	261.8	152.5	218.8	157.2	178.0	224.6
Grape Juice	50.0	104.8	86.0	89.9	108.7	33.5	51.0	81.9	46.5	96.8
Grapefruit Juice .	135.4	137.8	137.8	195.2	129.3	131.5	80.0	65.3	95.9	97.4
Grapefruit & Orange	32.7	10.0	31.7	24.8	27.7	17.7	21.6	12.6	28.1	27.7
Orange Juice	156.9	210.1	173.8	201.1	161.6	264.9	153.7	241.3	252.3	470.8
Pineapple Juice...	258.7	138.6	228.8	215.9	297.1	211.1	176.3	273.6	107.6	269.5
Tomato Juice† ...	151.5	154.3	159.1	107.4	76.7	75.2	91.0	58.3	66.4	122.6
Tomato Juice conc.	77.7	55.7	46.0	59.2	6.6	8.1	61.4	30.4	69.0	113.7
Total these items .	1,094.3	1,099.0	1,136.1	1,101.4	1,074.5	894.5	853.8	920.6	843.8	1,423.1

† Includes Vegetable Juice Cocktail.

CHILD NUTRITION PROGRAM*

(Source: Commodity Procurement Br., Fruit & Veg. Div., Agricultural Marketing Service, U.S.D.A.)

PACK YEAR*	1979	1980	1981	1982	1983	1984	1985	1986	1987	**1988
CANNED VEGETABLES—Thousands of Cases, Equiv. 24/303										
Beans Gr.	1,208.2	866.1	1,040.7	1,015.7	834.0	980.1	828.8	869.7	738.7	.....
Beans, Vegt.	1,172.6	994.4	834.0	773.4	762.7	1,040.7	714.5	832.2	804.6	451.0
Beans, Other ¹	670.0	762.7	413.4	420.6	402.7	513.3	585.9	477.6	740.3	1,752.8
Corn	2,031.5	905.3	.....	.....	630.9	1,005.0	1,281.6	749.2	545.4	.....
Peas	816.2	883.9	502.5	680.7	481.1	.....	521.6	515.0	439.0	.....
Potatoes, sweet... ²	†870.3	†524.2	†449.1	†862.5	345.7	463.3	743.1	401.1	370.0	348.9
Tomatoes	2,858.3	417.0	.....	.....	666.5	1,072.8	818.1	1,146.3	777.6	527.5
Tomato Catsup... ³	1,232.6	1,108.4	.....	.....	.....	.....	.....	.....	.....	.....
Tomato Paste	2,052.9	384.9	.....	.....	.....	1,414.9	721.7	730.4	732.7	194.7
Total	12,912.6	6,846.9	3,239.7	3,752.9	4,123.6	6,490.1	6,219.8	5,721.5	5,148.3	3,274.9
CANNED FRUITS—Thousands of Cases, Equiv. 24/2½										
Applesauce	1,224.5	1,230.6	916.9	876.4	763.0	1,079.0	1,200.0	733.4	1,204.3	608.1
Apricots	419.0	312.8	.....	.....	.....	443.3	.....	.....	.....	.....
Cranberry Sauce .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fruit Cocktail .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mixed Fruit .....	.....	.....	453.4	463.5	.....	.....	.....	.....	253.0	297.0
Peaches	787.3	1,129.4	1,856.0	1,226.5	759.0	665.9	542.3	642.9	648.5	364.1
Pears	900.7	1,224.5	916.9	846.0	1,261.0	718.5	230.7	929.1	925.1	919.5
Pineapple	653.8	459.4	481.7	477.7	.....	.....	425.6	429.8	423.0	.....
Plums	46.6	.....	137.6	.....	93.1	.....	.....	85.1	84.2	86.7
Total	4,031.9	4,356.7	4,762.5	3,890.1	2,876.1	2,906.7	2,398.6	2,820.3	3,538.1	2,275.4
CANNED JUICES—Thousands of Cases, Equiv. 24/2										
Apple	871.9	443.5	.....	.....	.....	.....	.....	.....	1,260.0	.....
Tomato	481.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Misc. ....	.....	.....	544.3	498.7	.....	264.6	.....	.....	.....	.....
Total	1,353.2	443.5	544.3	498.7	.....	264.6	.....	.....	1,260.0	.....

*Beginning 1975 includes small quantities utilized in elderly feeding programs and nonprofit institutions.
 Pack year beg. July 1. †Includes dehydrated sweet potatoes. ¹Pinto, small red, blackeyes, red kidney, baby lima and great northern. ²Orange. ³Grapefruit. ⁴Grape. **July 1, 1988 thru March 31, 1989.

DOMESTIC FEEDING PROGRAMS*

(Source: Commodity Procurement Br., Fruit & Veg. Div., Agricultural Marketing Service, U.S.D.A.)

PACK YEAR*	1979	1980	1981	1982	1983	1984	1985	1986	1987	*1988
CANNED VEGETABLES—Thousands of Cases, Equiv. 24/303										
Beans, Gr.	81.2	100.8	81.2	81.2	79.8	119.0	53.2	119.0	99.4	42.0
Beans, Vegt.	47.6	56.0	86.8	514.5	114.8	114.8	103.6	119.7	85.7	1,090.0
Corn	56.0	67.2	61.2	464.3	105.0	141.4	103.6	170.8	113.4	63.0
Peas	78.4	50.4	39.2	47.6	54.6	60.2	67.2	107.8	60.2	.....
Potatoes, Sweet... ²	25.2	22.4	16.8	329.4	47.6	26.6	42.0	42.0	60.2	260.2
Tomatoes ....	.....	14.0	36.4	75.6	56.0	14.0	64.4	88.2	61.6	.....
Other ¹	67.2	130.9	61.0	151.2	110.6	82.6	180.2	98.0	169.9	57.4
Total	355.6	441.7	382.6	1,663.8	568.4	558.6	564.2	745.5	650.4	1,512.6
CANNED FRUITS—Thousands of Cases Equiv. 24/2½										
Peaches	62.9	66.6	25.9	256.2	50.3	39.1	64.2	60.8	108.3	13.6
Pears	44.4	29.6	37.0	44.5	260.4	46.3	67.4	67.2	83.8	76.8
Pineapple	14.6	13.0	12.9	29.2	37.3	26.0	22.0	45.3	34.8	11.9
Other ¹	81.6	119.1	56.4	349.7	142.1	177.9	134.8	191.4	151.6	82.2
Total	203.5	228.3	132.2	679.6	490.1	289.3	288.4	364.7	378.5	184.5
CANNED JUICES—Thousands of Cases Equiv. 24/2										
Apple Juice	90.7	115.9	166.3	209.2	241.9	320.0	426.2	186.6	264.6	247.0
Grape Juice .....	.....	.....	.....	.....	.....	370.4	297.6	211.8	257.0	191.5
Grapefruit Juice... ³	60.5	63.0	85.7	499.0	68.0	17.6	85.7	74.4	71.8	622.0
Orange Juice	184.0	388.1	507.2	622.4	718.2	302.4	158.9	763.6	704.3	1,242.4
Pineapple Juice... ⁴	168.8	136.1	153.8	194.0	216.7	281.0	232.4	199.1	189.0	70.2
Tomato Juice ⁵ ...	85.6	55.4	52.9	85.7	80.6	73.1	109.7	95.8	92.0	27.7
Total	589.6	758.5	965.9	1,610.3	1,325.4	1,364.5	1,310.5	1,531.3	1,578.7	2,400.8

*Pack year beginning July 1. †Includes Vegetable Juice Cocktail. ¹Includes carrots, white potatoes, pumpkin, spinach. ²Includes applesauce, apricots, fruit cocktail, purple plums. ³Includes quantities purchased under the Hunger Relief Act of 1988 as follows: Vegt. Beans 1,037.0; Sweet Potatoes 221.0; Pears 33.7; Grapefruit Juice 568.0; Orange Juice 820.0.

GOVERNMENT PURCHASES—SPECIFIED FROZEN FOODS

MILITARY

Source: Fr. & Veg. Br., Contr. & Prod. Div., Dir. of Subsistence, Defense Personnel Support Center

Thousands of Pounds

PACK YEAR	1982	1983	1984	*1985	*1986	*1987	*1988
VEGETABLES							
Asparagus	1,027.0	423.0	802.0	1,196.0	672.0	1,116	495
Beans, Green & Wax	3,452.0	2,747.0	3,189.6	2,235.9	677.5	2,730	3,640
Beans, Lima	1,470.0	781.8	919.6	908.0	1,171.3	1,028	677
Broccoli	3,394.9	3,325.0	3,427.0	3,039.0	3,894.7	3,915	3,386
Brussel Sprouts	1,979.0	1,706.0	1,776.4	1,517.3	1,547.1	1,672	1,730
Carrots	1,122.0	1,112.0	838.0	1,244.2	1,282.4	1,615	2,106
Cauliflower	2,174.0	2,024.0	2,145.0	2,288.9	2,821.0	2,624	2,113
Corn	5,463.0	6,349.6	2,461.7	6,054.2	6,932.2	6,838	4,488
Greens	1,731.0	1,283.9	1,718.4	1,538.8	1,308.7	1,188	300
Okra	384.0	420.0	318.9	373.0	441.4	335	330
Onion Rings	1,153.0	1,102.0	1,575.2	1,000.1	2,017.5	2,251	1,710
Peas	2,650.0	2,133.0	2,253.0	2,312.1	2,756.1	2,350	2,839
Peas & Carrots	1,439.0	1,060.0	3,309.3	1,066.5	1,333.6	1,314	1,629
Peppers, Sweet	40.0	58.0	76.0	20.0	40.2	20	20
Potatoes, Diced	356.0	328.0	366.0	328.0	400.0	286	288
Potatoes, French fried	31,288.4	30,874.5	30,283.6	27,884.9	25,234.7	32,921	26,876
Potatoes, Shoestring	2,859.0	2,529.7	2,811.6	3,141.4	4,586.0	3,734	3,652
Potatoes, Shredded	6,819.0	4,670.6	6,380.1	6,621.6	8,385.5	10,061	9,623
Spinach	2,028.0	2,479.4	1,966.4	1,596.1	2,084.3	1,515	1,122
Squash	1,024.0	812.0	1,045.1	1,760.0	1,412.0	879	573
Succotash	1,478.7	1,381.0	714.3	1,671.6	1,245.5	1,344	1,494
Vegetables, Mixed	2,858.0	3,666.0	2,044.3	2,188.6	3,106.5	2,735	3,574
Total Above	76,190.0	71,266.5	70,421.5	69,986.2	73,350.9	82,471	72,663
FRUITS							
Blueberries	36.0	75.0	111.0	147.0	83.0	76.0	20.0
Cherries	29.0	0.0	.....	.....	.....	.....	.....
Peaches	62.0	55.0	226.0	.....	144.0	144.0	129.0
Raspberries	0.0	36.0	.....	.....	.8	.....	.....
Strawberries	1,261.0	1,300.0	1,742.0	1,680.5	496.0	137.0	1,056.0
Total Above	1,388.0	1,466.0	2,079.0	1,827.5	723.8	357.0	1,205.0
JUICES*, CONCENTRATED, conc. basis							
Grape Juice	2,891.7	3,924.9	3,957.6	141,385	157,007	143,210	162,367
Grapefruit Juice	347.8	592.6	624.4	28,648	104,259	110,650	3,400
Lemon Juice	66.6	40.8	42.8	7,983	88,699	75,200	5,667
Lime Juice	0.0	0.0	.....	.....	.....	.....	.....
Orange Juice	7,545.8	10,885.3	12,862.4	398,807	641,516	836,150	883,966
Total Above	10,851.9	15,443.6	17,487.2	576,823	991,481	1,165,210	555,400

*Juices reported on basis of cases of 12/32 oz. containers (concentrated product) beginning 1985.

USDA—CHILD NUTRITION

(Includes small quantities used for elderly)

(Source: Commodity Procurement Br., Fruit & Veg. Div., Agricultural Marketing Service, U.S.D.A.)

Thousands of Pounds

PACK YEAR ¹	1980	1981	1982	1983	1984	1985	1986	1987	**1988
Beans, Green	5,082	1,848	1,254	726	1,056	396	1,014	390	.....
Corn .....	.....	.....	.....	4,554	3,894	1,056	1,794	2,769	.....
Peas	8,118	.....	2,178	1,056	.....	1,452	2,847	4,953	.....
Potato Rounds	20,130	9,900	43,230	.....	24,156	54,258	28,386	22,851	29,250
Potatoes, French Fried .....	.....	12,672	47,257	37,554	19,734	50,124	28,233	46,022	28,974
Vegetables, Mixed .....	.....	.....	.....	.....	18,612	16,632	14,407	14,167	.....
Total	33,330	24,420	93,919	43,890	67,452	123,918	76,681	91,152	58,224
Blackberries .....	.....	.....	.....	.....	.....	.....	.....	300	1,872
Blueberries .....	.....	.....	.....	560	5,563	6,923	.....	.....	.....
Cherries, RTP .....	.....	19,650	8,888	.....	13,200	21,562	39,036	18,168	4,723
Lemon Juice (Conc.) .....	.....	.....	2,268	.....	.....	.....	.....	.....	.....

¹July 1 thru June 30 beginning year shown.

**July 1, 1988 thru March 31, 1989.

CIVILIAN PER CAPITA CONSUMPTION

FRUIT JUICES—CANNED & CHILLED¹

Source: USDA, Economic Research Service, Commodity Economics Div.
Per Capita Consumption—Pounds—Single Strength Basis

Year	Canned									Chilled ^a	
	Citrus				Noncitrus						
	Orange	Grapefruit	Blended orange and grapefruit	Lemon and lime	Apple	Fruit nectars	Grape	Pineapple	Prune	Orange ^b	Grapefruit
1970...	1.75	2.99	0.33	0.10	2.7	0.68	0.58	3.0	1.09	4.28	0.33
1971...	1.66	3.24	.31	.10	3.2	.67	.71	2.7	1.07	4.28	.42
1972...	1.51	3.25	.25	.10	2.6	.56	.53	2.8	.66	4.51	.61
1973...	1.74	3.42	.24	.10	2.6	.50	.56	3.3	.97	4.61	.54
1974...	1.48	3.49	.22	.10	2.5	.52	.67	2.3	.72	4.59	.52
1975...	1.52	3.34	.23	.12	2.9	.77	.59	2.1	.81	4.96	.61
1976...	1.37	3.33	.32	.08	3.3	.76	.56	1.9	.99	5.31	.72
1977...	1.46	3.13	.21	.08	3.3	.67	.45	2.3	.88	4.92	.69
1978...	1.74	3.50	.17	.06	4.3	.75	.92	2.6	.93	5.25	.74
1979...	2.04	3.35	.08	.05	5.3	.56	.65	2.7	.80	4.83	.57
1980...	1.98	2.92	.09	.05	4.8	.67	.65	2.7	.86	5.15	.64
1981...	2.26	2.42	.07	.06	6.4	.69	.68	2.8	.92	3.62	.48
1982...	1.74	2.07	.04	.03	7.2	.51	.64	n.a.	.78	3.17	.30
1983...	1.24	1.58	.08	.07	8.6	.36	.91	n.a.	.61	3.86	.23
1984...	1.47	1.20	.07	.07	n.a.	.27	.75	n.a.	.66	3.41	.23
1985...	.85	1.31	.04	.05	n.a.	.41	.52	n.a.	.64	3.00	.18
1986...	.82	1.13	.04	.05	n.a.	.36	.50	n.a.	.63	3.55	.21
1987...	.90	1.01	.03	.05	n.a.	.26	.80	n.a.	.54	4.21	.24

¹Calendar year basis except for citrus juices, which are on a pack-year basis beginning prior to year indicated.

²Chilled fruit juice produced commercially from fresh fruit in Florida; does not include reconstituted or frozen juice or fresh juice produced for local sale. ³Includes orange juice processed only from Florida oranges.

FRUIT JUICES—FROZEN CITRUS¹

Year	Orange	Grapefruit	Lemon	Lemonade Base	Tangerine	Total
1970.....	20.73	0.74	0.06	0.24	0.18	21.94
1971.....	24.22	.81	.09	.25	.18	25.55
1972.....	27.71	1.09	.09	.28	.18	29.35
1973.....	26.86	1.09	.06	.34	.18	28.53
1974.....	29.47	1.16	.06	.31	.14	31.14
1975.....	32.78	.99	.26	.72	.21	34.96
1976.....	34.33	.28	.02	.38	.11	35.12
1977.....	34.12	1.83	.14	.28	.25	36.62
1978.....	27.53	1.80	.25	.50	.25	30.32
1979.....	30.32	1.80	.21	.35	.21	32.91
1980.....	31.76	1.52	.09	.18	.21	33.76
1981.....	30.14	2.33	.17	.27	.32	33.23
1982.....	33.24	2.54	.25	.53	.32	36.88
1983.....	38.74	2.33	.17	.28	.07	41.59
1984.....	33.42	1.59	.17	.29	.11	35.57
1985.....	36.13	3.53	.21	.36	.11	40.32
1986.....	39.66	2.57	.48	.24	.11	43.06
1987.....	35.74	3.56	.28	.26	.14	39.98

¹Frozen concentrated fruit juices converted to single-strength on basis of 3.525 pounds to 1; Lemonade base, 0.74 to 1.

APPENDIX—PER CAPITA CONSUMPTION—Continued

FRUITS—CANNED & CHILLED

Per Capita Consumption—Pounds Processed Weight

Year	Apples and applesauce	Apricots	Berries	¹ Cherries	Cran- berries	Salad and cocktail	Peaches
1970.....	3.7	.97	.10	.94	.9	3.23	5.72
1971.....	3.6	1.01	.12	1.01	.8	2.73	5.34
1972.....	3.5	.73	.13	.72	.8	2.72	5.59
1973.....	3.4	.76	.13	.70	1.0	3.08	4.72
1974.....	3.1	.64	.09	.61	.9	2.74	4.79
1975.....	3.1	.50	.14	.74	.7	2.64	4.83
1976.....	2.3 ²	.62	.10	.61	.7	2.70	4.90
1977.....	2.5	.59	.11	.58	.7	2.81	4.97
1978.....	2.6	.45	.05	.60	.8	2.85	4.22
1979.....	2.5	.45	.05	.66	.8	2.74	3.99
1980.....	2.4	.51	.05	.78	.8	2.57	3.94
1981.....	2.0	.44	.08	.72	.7	2.32	3.58
1982.....	2.0	.35	.08	.47	.7	2.33	3.68
1983.....	2.4	.33	.09	.46	.7	1.76	3.48
1984.....	n.a.	.32	.07	.57	n.a.	2.10	3.19
1985.....	n.a.	.33	.09	.60	n.a.	1.91	2.93
1986.....	n.a.	.29	n.a.	.09	n.a.	1.99	3.27
1987.....	n.a.	.20	n.a.	.08	n.a.	2.24	3.37
	Pears	Pineapples	Plums and prunes	Olives	Citrus sections	Chilled citrus sections	Total ³
1970.....	2.02	3.3	.32	1.07	.9	.4	14.37
1971.....	2.00	3.3	.27	.91	.9	.3	13.39
1972.....	2.00	3.4	.21	.73	.8	.3	12.83
1973.....	2.25	3.4	.20	.76	.8	.3	12.60
1974.....	1.78	2.6	.23	.90	.8	.3	11.78
1975.....	1.86	2.6	.19	.87	.7	.3	11.77
1976.....	2.07	2.7	.25	.98	.6	.3	12.23
1977.....	2.17	2.8	.21	.97	.6	.2	12.41
1978.....	1.76	3.0	.22	.73	.7	.2	10.88
1979.....	1.77	3.0	.19	1.03	.7	.2	10.88
1980.....	1.85	3.0	.14	.82	.6	.2	10.66
1981.....	1.62	3.0	.16	1.05	.7	.2	9.97
1982.....	1.87	n.a.	.16	.73	.6	.2	9.67
1983.....	1.76	n.a.	.13	1.24	.6	.2	9.25
1984.....	1.59	n.a.	.12	.95	n.a.	n.a.	8.91
1985.....	1.31	n.a.	.09	1.18	n.a.	n.a.	8.44
1986.....	1.51	n.a.	.12	1.12	n.a.	n.a.	8.39
1987.....	1.50	n.a.	.11	1.23	n.a.	n.a.	8.73

¹Beginning 1986 excludes cherries in brine.

²Not comparable to previous years.

³Excludes apples/sauce.

n.a. - Not available.

APPENDIX—PER CAPITA CONSUMPTION—Continued

FRUITS—FROZEN

Per Capita Consumption—Pounds Processed Weight

Year	Black-berries	Rasp-berries	Straw-berries	Blue-berries	Other berries	Apples	Apri-cots	Cherries	Peaches	Misc. ²	Total
1970....	.10	.16	1.19	.21	.06	.47	.06	.61	.28	.20	3.34
1971....	.16	.16	1.41	.18	.07	.53	.07	.68	.26	.16	3.68
1972....	.11	.12	1.35	.18	.06	.66	.04	.64	.31	.16	3.63
1973....	.08	.10	1.19	.16	.05	.61	.08	.81	.23	.20	3.51
1974....	.06	.09	1.13	.14	.04	.33	.06	.49	.28	.14	2.76
1975....	.08	.09	1.40	.19	.04	.45	.07	.44	.28	.15	3.19
1976....	.12	.13	1.28	.13	.05	.39	.06	.67	.13	.11	3.07
1977....	.12	.13	1.16	.13	.04	.44	.07	.62	.28	.20	3.19
1978....	.10	.10	1.37	.11	.05	.39	.07	.64	.27	.18	3.28
1979....	.06	.08	1.13	.13	.03	.33	.06	.52	.21	.13	2.68
1980....	.02	.08	1.39	.18	.03	.35	.07	.48	.27	.19	3.06
1981....	.04	.08	1.32	.17	.02	.37	.05	.49	.19	.15	2.88
1982....	.09	.07	1.14	.11	.02	.43	.06	.61	.23	.17	2.93
1983....	.08	.07	1.17	.04	.04	.32	.07	.63	.31	.19	2.92
1984....	.04	.06	1.24	.25	.02	.38	.06	.58	.28	.11	3.02
1985....	.06	.10	1.21	.22	.02	.35	.07	.58	.40	.26	3.27
1986....	.04	.09	1.26	.38	.03	.40	.07	.66	.41	.21	3.55
1987....	.05	.07	1.28	.29	.02	.53	.08	1.00	.27	.27	3.86

²Includes grapes & pulp, plums, prunes & misc. not listed separately.

FISHERY PRODUCTS¹

Per Capita Consumption—Pounds Edible Weight

Year	Fresh and frozen			Canned						Cured	Total
	Fish	Shell-fish	Total	Salmon	Sardines	Tuna	Shell-fish	Other	Total		
1964....	3.8	2.1	5.9	0.7	0.3	2.0	0.5	0.6	4.1	0.5	10.5
1965....	3.8	2.2	6.0	.9	.3	2.3	.4	.4	4.3	.5	10.8
1966....	3.9	2.2	6.1	.8	.4	2.3	.4	.4	4.3	.5	10.9
1967....	3.6	2.2	5.8	.7	.4	2.4	.5	.3	4.3	.5	10.6
1968....	4.0	2.2	6.2	.7	.4	2.4	.5	.3	4.3	.5	11.0
1969....	4.4	2.2	6.6	.7	.4	2.4	.5	.2	4.2	.4	11.2
1970....	4.5	2.4	6.9	.7	.4	2.5	.5	.4	4.5	.4	11.8
1971....	4.3	2.4	6.7	.7	.4	2.4	.5	.3	4.3	.5	11.5
1972....	4.7	2.4	7.1	.7	.4	2.9	.5	.4	4.9	.5	12.5
1973....	5.2	2.2	7.4	.4	.5	3.1	.5	.5	5.0	.4	12.8
1974....	4.4	2.5	6.9	.3	.4	3.1	.5	.4	4.7	.5	12.1
1975....	4.9	2.6	7.5	.3	.2	2.9	.5	.4	4.3	.4	12.2
1976....	5.6	2.6	8.2	.3	.3	2.8	.4	.4	4.2	.5	12.9
1977....	5.1	2.6	7.7	.5	.3	2.8	.6	.4	4.6	.4	12.7
1978....	5.5	2.6	8.1	.6	.3	3.3	.5	.3	5.0	.3	13.4
1979....	5.4	2.4	7.8	.5	.3	3.2	.5	.3	4.8	.4	13.0
1980....	5.5	2.5	8.0	.5	.3	2.9	.5	.3	4.5	.3	12.8
1981....	5.0	2.8	7.8	.5	.4	3.1	.5	.3	4.8	.3	12.9
1982....	5.1	2.6	7.7	.5	.3	2.7	.4	.4	4.3	.3	12.3
1983....	5.2	2.8	8.0	.5	.2	3.1	.6	.4	4.8	.3	13.1
1984....	5.3	3.0	8.5	.6	.2	3.2	.4	.5	4.9	.3	13.7
1985....	5.2	3.8	9.0	.5	.3	3.3	.5	.5	5.1	.3	14.4
1986....	5.4	3.6	9.0	.5	.3	3.6	.4	.6	5.4	.3	14.7
1987....	6.3	3.7	10.0	.4	.3	3.5	.5	.4	5.1	.3	15.4
1988....	5.9	3.7	9.6	.3	.3	3.6	.4	.5	5.1	.3	15.0

APPENDIX—PER CAPITA UTILIZATION

VEGETABLES, SELECTED—FRESH, CANNED, FROZEN

Per Capita Utilization—Pounds—Farm Weight Basis—Figures Rounded

Source: U.S.D.A., Economic Research Service

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	*1987
Asparagus:											
Fresh.....	.3	.3	.3	.3	.3	n.a.	n.a.	.4	.5	.6	.6
Canning.....	.4	.4	.3	.4	.4	n.a.	n.a.	n.a.	.3	.3	.3
Freezing.....	.2	.2	.2	.1	.1	n.a.	n.a.	.1	.1	.1	.1
Beans, green:											
Canning.....	4.1	4.2	4.2	4.1	4.2	3.7	3.7	3.4	3.5	3.8	3.7
Freezing.....	1.2	1.4	1.5	1.6	1.5	1.5	1.7	1.7	1.7	1.5	2.0
Broccoli:											
Fresh.....	1.2	1.1	1.4	1.6	1.8	2.2	2.3	2.7	2.9	3.5	3.6
Freezing.....	1.2	1.4	1.4	1.4	1.5	1.5	1.5	1.8	1.9	1.7	2.2
Corn ¹ :											
Fresh.....	7.6	7.3	7.2	7.2	7.1	7.1	7.3	7.6	7.6	7.2	7.3
Canning.....	14.1	13.2	12.5	12.9	12.1	11.4	11.5	10.1	11.7	11.9	10.5
Freezing.....	7.4	6.3	6.8	6.4	6.2	5.7	6.6	7.9	7.8	7.5	7.9
Carrots:											
Fresh.....	5.1	5.6	6.4	7.0	7.1	7.3	7.5	7.9	7.6	7.7	8.5
Canning.....	1.0	.9	1.0	.9	.9	.8	.8	1.1	.9	.8	.9
Freezing.....	2.7	2.5	2.7	2.5	2.5	2.2	2.2	2.9	2.4	2.2	2.4
Cauliflower:											
Fresh.....	1.1	.9	1.3	1.3	1.6	1.6	1.7	2.2	2.3	2.7	2.7
Freezing.....	.7	.8	.7	.8	.9	.9	.8	.9	.9	.9	.9
Cucumbers for:											
Pickles.....	5.9	6.0	5.9	5.6	n.a.	n.a.	n.a.	n.a.	5.7	5.3	5.1
Mushrooms:											
Fresh.....	.9	1.0	1.1	1.2	1.4	1.4	1.6	1.8	1.8	1.9	n.a.
Processing.....	1.6	1.6	1.7	1.5	1.5	1.5	1.7	1.4	1.7	1.8	n.a.
Dehydrating..	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	n.a.
Peas, green:											
Canning.....	3.0	2.9	2.6	2.7	2.7	2.5	2.4	2.0	2.0	2.2	2.0
Freezing.....	1.8	1.8	1.9	1.8	1.7	1.7	1.8	2.0	2.1	1.9	1.7
Potatoes:											
Fresh.....	50.1	46.1	46.6	51.0	45.7	46.6	49.9	48.8	46.6	49.6	44.0
Canning.....	2.2	2.3	2.1	1.9	1.8	1.9	1.9	1.8	1.9	1.1	1.8
Freezing.....	42.3	41.4	41.6	36.1	38.4	40.3	38.3	41.6	44.3	44.3	44.3
Other processing	27.6	28.5	27.6	26.1	27.4	27.3	27.6	28.1	28.8	28.6	28.6
Tomatoes:											
Fresh.....	12.4	13.2	12.8	13.4	13.2	13.4	13.7	15.3	16.1	17.2	16.8
Canning.....	62.8	58.8	64.3	63.6	59.3	60.1	60.8	68.4	63.1	63.4	64.6

n.a. - Not available.

¹"On-Cob" basis.

*Preliminary. 1988 Data not available at press time.

EXPENDITURES—FOOD FOR OFF-PREMISE USE

Source: U.S.D.A., Economic Research Service—Millions of Dollars

Year	² Food-stores	³ Other stores	Food sales Home delivery and mail order	Farmers, manu-facturers, and wholesalers	Total	Home production and donations	Total for off-premise use
1970.....	65,480	3,765	2,383	1,813	73,441	4,086	77,527
1971.....	69,161	4,004	2,373	1,828	77,366	4,080	81,446
1972.....	75,520	3,865	2,423	1,828	83,636	4,297	87,933
1973.....	83,200	4,556	2,294	2,019	92,069	5,217	97,286
1974.....	94,529	5,079	2,233	2,297	104,138	6,114	110,252
1975.....	103,624	5,739	1,976	2,536	113,875	5,975	119,850
1976.....	110,793	6,283	1,886	2,724	121,686	6,149	127,835
1977.....	118,256	7,070	2,264	2,934	130,524	6,035	136,559
1978.....	130,568	7,705	2,385	3,221	143,879	6,476	150,355
1979.....	145,943	8,416	2,567	3,565	160,491	6,992	167,483
1980.....	161,439	9,261	2,762	3,901	177,363	8,275	185,638
1981.....	172,227	10,138	2,729	4,146	189,240	9,280	198,520
1982.....	179,164	10,776	2,616	4,215	196,771	9,435	206,206
1983.....	187,787	12,532	2,523	4,316	207,158	9,935	217,093
1984.....	198,119	13,935	2,491	4,501	219,046	9,324	228,370
1985.....	206,569	15,034	3,289	4,657	229,549	7,079	236,628
1986.....	212,525	16,433	3,416	4,689	237,063	7,698	244,761
1987.....	219,513	16,831	3,874	4,725	244,943	8,412	253,355
1988.....	228,976	17,755	4,087	4,851	255,669	8,360	264,029

²Excludes estimated sales to restaurants and institutions, and trailer parks; commissary stores, and military exchanges.

³Includes eating and drinking establishments

EXPENDITURES—MEALS AND SNACKS

Source: U.S.D.A., Economic Research Service—Millions of Dollars

Year	² Eating and drinking places	³ Hotels and motels	⁴ Retail stores, direct selling	⁵ Recreational places	⁶ Schools and colleges	⁷ All other	Total for meals & snacks
1970.....	22,617	1,894	3,325	721	4,475	6,551	39,583
1971.....	24,166	2,086	3,626	762	4,990	6,621	42,251
1972.....	27,167	2,390	3,811	832	5,370	7,017	46,587
1973.....	31,265	2,639	4,218	963	5,605	7,960	52,650
1974.....	34,029	2,864	4,520	1,167	6,287	9,178	58,045
1975.....	41,384	3,199	4,952	1,369	7,060	10,145	68,109
1976.....	47,536	3,769	5,341	1,511	7,854	10,822	76,833
1977.....	52,491	4,115	5,663	2,606	8,413	11,661	84,949
1978.....	60,042	4,863	6,323	2,810	9,934	13,109	96,181
1979.....	68,872	5,551	7,157	2,921	9,942	14,864	109,307
1980.....	75,883	5,906	8,158	3,040	11,180	16,363	120,530
1981.....	83,358	6,639	8,830	2,979	11,816	17,941	131,563
1982.....	90,390	6,888	9,246	2,887	12,415	18,892	140,718
1983.....	97,840	7,555	10,163	3,142	13,155	19,821	151,676
1984.....	103,874	8,173	11,115	3,347	13,799	21,529	161,837
1985.....	108,575	8,785	12,447	3,513	14,501	22,303	170,124
1986.....	117,309	9,116	13,278	3,734	15,278	23,656	181,371
1987.....	129,059	10,170	14,275	4,059	16,023	25,059	198,645
1988.....	138,539	11,349	15,115	4,333	16,422	26,741	212,499

²Includes tips. ³Includes vending machine operators but not vending machines operated by other organizations. ⁴Motion picture theaters, bowling alleys, pool parlors, sport arenas, camps, amusement parks, golf and country clubs. Includes concessions beginning 1977. ⁵Includes school food subsidies.

⁶Military exchanges and clubs; railroad dining cars; airlines; food service in manufacturing plants, institutions, hospitals, boarding houses, fraternities and sororities, and civic and social organizations; and food supplied to military forces and civilian employees; child daycare.

FOODSERVICE ANALYSIS BY INDUSTRY SEGMENT *Source: USDA Economic Research Service*

FOODSERVICE — SALES

Industry segment	1980	1981	1982	1983	1984	1985	1986 ¹	1987 ¹
	<i>Million dollars</i>	<i>Million dollars</i>	<i>Million dollars</i>	<i>Million dollars</i>	<i>Million dollars</i>	<i>Million dollars</i>	<i>Million dollars</i>	<i>Million dollars</i>
Separate eating places:								
Restaurants, lunchrooms	35,615	38,805	40,931	44,731	48,419	52,296	54,077	57,942
Fast food outlets	28,706	31,523	36,492	41,398	47,319	51,453	53,767	56,822
Caterers	2,426	2,575	2,699	2,871	3,022	2,992	2,817	2,919
Total ²	67,557	73,787	80,967	90,356	99,782	106,743	112,661	117,683
Lodging places:								
Retail hotels	5,258	5,989	6,164	6,756	7,264	7,355	7,862	7,913
Recreation, entertainment	3,365	3,835	3,943	4,318	4,779	5,242	5,391	5,808
Separate drinking places	2,362	2,471	2,813	3,093	3,394	3,510	3,935	4,215
Total ²	1,100	1,121	1,098	1,111	1,076	982	903	844
Commercial feeding total ²	79,814	87,154	94,985	105,634	116,095	123,500	130,603	136,046
Education								
Elementary, secondary	7,875	8,099	7,368	7,537	7,330	8,472	8,673	8,803
Colleges, universities	2,824	3,126	3,487	3,886	4,092	4,230	4,544	4,803
Other education	134	152	175	201	217	240	267	277
Total ²	10,833	11,376	11,030	11,624	12,239	12,942	13,343	13,624
Hospitals	5,145	5,669	5,919	6,258	6,793	7,186	7,365	7,525
Care facilities	4,919	5,366	5,609	5,715	5,817	5,905	6,392	6,750
Vending	3,602	4,072	4,797	4,983	5,281	5,452	5,522	5,732
Military services	3,094	3,183	3,214	3,348	3,533	3,730	3,685	3,705
Troop feeding	1,496	1,619	1,644	1,709	1,765	1,853	1,933	2,002
Clubs, exchanges	438	490	522	546	601	617	627	642
Total ²	1,934	2,109	2,166	2,255	2,366	2,470	2,560	2,644
Transportation	1,563	1,656	1,685	1,793	1,922	1,996	2,296	2,469
Associations	1,153	1,276	1,431	1,501	1,562	1,610	1,692	1,714
Correctional facilities	705	786	1,018	1,092	1,155	1,205	1,388	1,505
Child day care centers	469	641	607	663	760	835	920	1,012
Elderly feeding programs	456	544	579	629	689	744	804	884
Other	192	208	223	238	252	268	287	303
Noncommercial feeding total ²	34,064	36,896	38,279	40,098	42,390	44,343	46,254	47,887
Grand total ²	113,878	124,040	133,264	145,733	158,485	167,843	176,857	183,933

¹ Preliminary
² Totals may not add due to rounding

FOODSERVICE—NUMBER OF ESTABLISHMENTS

Industry segment	1980	1981	1982	1983	1984	1985	1986	1987 ¹
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
Separate eating places:								
Restaurants, lunchrooms	121,269	122,060	122,851	129,642	124,433	125,302	125,237	124,983
Fast food outlets	110,469	113,794	117,119	129,444	123,769	124,809	125,032	126,619
Caterers	6,418	6,223	6,029	5,835	5,640	5,388	4,577	4,420
Total ²	238,157	242,089	245,999	254,921	253,854	255,699	254,846	256,022
Lodging places:								
Retail hotels	24,152	23,559	24,448	25,863	25,262	22,613	24,333	25,413
Recreation, entertainment	58,808	58,193	57,578	56,963	56,348	56,005	55,616	54,942
Separate drinking places	33,902	33,096	34,093	34,188	34,282	34,910	35,716	36,125
Total ²	116,862	114,848	116,119	117,014	115,900	113,528	115,665	116,480
Commercial feeding total ²	355,019	356,937	362,118	371,935	369,754	369,227	370,511	372,502
Education								
Elementary, secondary	94,100	92,000	91,300	90,600	89,600	89,424	88,824	88,414
Colleges, universities	3,231	3,253	3,280	3,284	3,288	3,299	3,312	3,443
Other education	2,937	2,925	2,906	2,975	3,000	3,076	3,120	3,195
Total ²	100,268	99,078	97,546	96,839	95,888	95,799	95,256	95,042
Hospitals	15,780	15,747	15,414	15,409	15,846	15,963	16,006	16,814
Care facilities	6,965	6,933	6,915	6,888	6,861	6,835	6,810	6,796
Vending	23,065	24,941	26,817	27,875	28,933	29,711	30,599	31,218
Military services	3,660	3,634	3,608	3,582	3,556	3,535	3,507	3,480
Troop feeding	1,275	1,389	1,387	1,341	1,310	1,290	1,250	1,222
Clubs, exchanges	2,448	2,435	2,431	2,439	2,042	1,980	1,940	1,913
Total ²	37,223	37,224	37,181	37,161	37,352	37,270	37,190	37,335
Transportation	696	714	684	644	642	640	626	607
Associations	19,150	19,211	19,272	19,333	19,394	19,450	19,506	19,562
Correctional facilities	6,924	6,977	7,031	7,085	7,164	7,204	7,232	7,255
Child day care centers	45,155	46,657	50,679	54,800	58,410	61,175	63,410	64,819
Elderly feeding programs	12,536	12,915	13,246	13,993	14,035	14,068	14,167	14,605
Other	15,914	15,841	16,159	16,479	16,799	17,101	17,389	17,681
Noncommercial feeding total ²	273,875	274,472	281,169	290,708	296,645	301,986	310,760	315,672
Grand total ²	636,153	678,472	691,424	698,738	706,098	711,855	720,633	726,674

¹ Preliminary
² Totals may not add due to rounding

1987 CENSUS OF MANUFACTURERS

PRELIMINARY DATA RELEASED MAY 1989

Source: U.S. Department of Commerce, Bureau of Census

GENERAL

The 1987 Census of Manufactures is the 32nd census of manufacturing establishments conducted in the United States. Title 13 of the United States Code specifies that an economic census be conducted every 5 years to cover years ending in 2 and 7.

SCOPE AND COVERAGE

ESTABLISHMENT BASIS OF REPORTING

All manufacturing establishments with one paid employee or more at any time during the year are covered by the census of manufactures. Therefore, a company operating at more than one location is required to file a separate report for each location. This report excludes information for separately operated administrative offices, warehouses, garages, and other auxiliary units which service manufacturing establishments of the same company. Where these auxiliary operations are conducted at the same location as the manufacturing operation, they are usually included in the report for the operating manufacturing establishment.

USE OF ADMINISTRATIVE RECORDS

From a universe of approximately 350,000 manufacturing establishments in the 1987 Census of Manufactures, approximately 150,000 small single-establishment companies were excused from filing reports. Selection of the small establishment nonmail cases was done on an industry-by-industry basis. A variable cutoff was used to determine those establishments for which administrative records were to be used in place of a census report. The cutoffs were selected so the administrative-record cases would account for approximately 3 percent or less of the value of shipments for the industry. These cutoffs were then adjusted so that all single-establishment companies with less than 5 employees were excluded from the mail canvass, while all establishments with more than 20 employees were included. Where establishments in the 5 to 20 employee size range were included in the mail canvass, an abbreviated census form was frequently used.

For these nonmail establishments, (and a small number of larger establishments whose reports were not received at the time the data were tabulated) data on employment, payroll, and receipts were obtained from administrative records of other government agencies rather than from census forms. The administrative-record information was then used in conjunction with industry averages to estimate the data for these establishments. The value of shipments and cost of materials were not distributed among specific products and materials but were included in the product and material "not specified by kind" (n.s.k.) categories.

EXPLANATION OF TERMS

NUMBER OF ESTABLISHMENTS AND COMPANIES—A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

ALL EMPLOYEES—Includes all full-time and part-time employees on the payrolls at any time during the year. Included are all persons on paid sick leave, paid holidays, and paid vacations. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average of those for midmonth payroll periods of March, May, August, and November.

PRODUCTION WORKERS—Includes workers up through the working-supervisor level engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial, guard services, product development, auxiliary production for plant's own use (e.g. power-plant), recordkeeping, and other closely associated services. Truckdrivers delivering ready-mixed concrete are also included in production workers.

OTHER EMPLOYEES—Includes nonproduction personnel, including those engaged in the following activities: supervision above working-supervisor level, sales (including driver/salespersons), sales delivery (truckdrivers and helpers), advertising, credit collection, installation and servicing of own product, clerical and routine office functions, executive, purchasing, finance, legal, personnel (including cafeteria, etc.), professional, and technical employees.

PRODUCTION-WORKER HOURS—Covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave when the employee was not at the plant.

COST OF MATERIALS—Refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuels consumed, regardless of whether they were purchased by the individual establishments from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

The important components of this cost item

1987 CENSUS OF MANUFACTURERS — PRELIMINARY — Continued

are (a) all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or generating electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

SPECIFIC MATERIALS CONSUMED (Table 3)—In addition to the total cost of materials which every establishment was required to report, information was also collected for most manufacturing industries on the consumption of major materials used in manufacturing. These inquiries were restricted to those materials which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturer's records. Establishments consuming less than a specified amount (usually \$10,000) of a specific material were not requested to report consumption of that material separately. Also, the cost of materials for the small establishments for which administrative records were used was estimated as "not specified by kind" (n.s.k.).

VALUE OF SHIPMENTS AND OTHER RECEIPTS—Generally refers to received and receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair receipts, sale of scrap, and sale of products bought and resold without further processing. Included are all items made by or for the establishment from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In a few industries, the value of production or value of work completed is used instead of value of shipments. These industries are identified in the introduction and are footnoted in table 1.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, that is, including not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead and profit).

VALUE ADDED BY MANUFACTURE—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments for products manufactured plus receipts for services rendered. The result of this calculation is then adjusted by the addition of value added by merchandising operations (that is, the difference between the sales value and cost of merchandise sold without further

manufacturing, processing, or assembly) plus the net change in finished goods and work-in-process inventories between the beginning and end of the year.

For those industries where value of production is collected instead of value of shipments (see footnote in table 1), value added is adjusted only for the change in work-in-process inventories between the beginning and end of the year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

Value added avoids the duplication in the figure for value of shipments which results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

EXPENDITURES FOR NEW PLANT AND EQUIPMENT—Establishments in operation and any known plants under construction were asked to report their expenditures for (a) permanent additions and major alterations to manufacturing establishments and (b) new machinery and equipment used for replacement and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

SPECIALIZATION AND COVERAGE RATIOS—An establishment is classified in a particular industry if its shipments of primary products of the industry exceed in value its shipments of the products of any other single industry. An establishment's shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.). The following ratios have been developed to measure the relationship of primary product shipments to the data on shipments for the industry shown in table 1 and data on product shipments shown in table 2.

SPECIALIZATION RATIO—Represents the ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for the establishments classified in the industry.

COVERAGE RATIO—Represents the ratio of primary products shipped by the establishments classified in the industry to the total shipments of such products that are shipped by all manufacturing establishments, wherever classified.

DESCRIPTION OF INDUSTRIES

CANNED FRUITS AND VEGETABLES, SIC 2033 — This industry comprises establishments primarily engaged in canning fruits, vegetables, and fruit and vegetable juices; and in manufacturing catsup and similar tomato sauces, preserves, jams, and jellies.

1987 CENSUS OF MANUFACTURERS — PRELIMINARY — Continued

CANNED SPECIALTIES, SIC 2032 — This industry comprises establishments primarily engaged in the canning of specialty products, such as baby foods, "native foods", health foods, and soups, except seafood. Establishments primarily engaged in canning seafoods other than frozen are classified in industry 2092, and those primarily engaged in quick frozen canned specialties in industry 2038.

FROZEN FRUITS AND VEGETABLES, SIC 2037 — This industry comprises establishments primarily engaged in freezing and cold packing (freezing) fruits, fruit juices, and vegetables. Establishments primarily engaged in freezing and coldpacking (freezing) food specialties, such as frozen dinners and frozen pizzas, are classified in industry 2038.

FROZEN SPECIALTIES, SIC 2038 — This industry comprises establishments primarily engaged in freezing and cold packing (freezing) food specialties, such as frozen dinners and frozen pizza. Establishments primarily engaged in freezing and cold packing fruits, fruit juices, and vegetables are classified in industry 2037.

For the 1987 Census frozen dough and certain frozen baked goods were transferred to the 2041, 2045 and 2053 series.

PICKLES, SAUCES, AND SALAD DRESSING, SIC 2035 — This industry comprises establishments primarily engaged in pickling and brining fruits and vegetables, and in manufacturing salad dressings, vegetable relishes, sauces, and seasonings. Establishments primarily engaged in the manufacture of catsup and similar tomato sauces are classified in industry 2033, and those packing purchased pickles and olives in trade industries.

DEHYDRATED FRUITS, VEGETABLES, AND SOUPS, SIC 2034 — This industry comprises establishments primarily engaged in sun drying or artificially dehydrating fruits and vegetables, or in manufacturing packaged soup mixes from dehydrated ingredients. Establishments primarily engaged in the grading and marketing of farm dried fruits, such as prunes and raisins, are classified in industry 5149.

For the 1987 census certain potato products mixed with other ingredients were included with the 2099 series.

CANNED AND CURED SEAFOODS, SIC 2091 — This industry comprises establishments primarily engaged in cooking and canning fish, shrimp, oysters, clams, crabs, and other seafoods, including soups; and those engaged in smoking, salting, drying, or otherwise curing fish for the trade.

Establishments primarily engaged in shucking and packing fresh oysters in nonsealed containers, or in freezing and packaging fresh fish are classified in industry 2092.

Preliminary 1987 Data for SIC 2091 expected to be released Fall 1989.

FRESH OR FROZEN PACKAGED FISH, SIC 2092 — This industry comprises establishments primarily engaged in preparing fresh and raw or cooked frozen packaged fish and other seafood, including soups. This industry also includes establishments primarily engaged in the shucking and packing of fresh oysters in nonsealed containers.

Preliminary 1987 Data for SIC 2092 expected to be released Fall 1989.

Table 3. MATERIALS CONSUMED BY KIND: 1987 and 1982

Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry.

Material	1987		1982	
	Quantity ¹	Delivered cost (million dollars)	Quantity ¹	Delivered cost (million dollars)
INDUSTRY 2037, FROZEN FRUITS AND VEGETABLES				
Materials, ingredients, containers, and supplies	(X)	3 348.7	(X)	2 824.7
Fresh fruit:				
Oranges	1,000 s tons	2 028.5	423.5	*5 805.2
Apples	do	184.0	52.1	313.3
Strawberries	do	100.3	61.3	*71.7
Other fresh fruits	do	1 061.8	229.1	2 088.9
Fresh vegetables:				
Green peas	1,000 s tons	152.2	36.7	*175.2
White potatoes	do	5 218.0	539.5	4 337.0
Sweet corn	do	486.6	46.0	782.0
Green or wax beans	do	119.4	26.3	150.8
Other fresh vegetables	do	1 021.9	280.0	*1 192.9
Other materials, ingredients, containers, and supplies:				
Sugar, cane and beet, in terms of sugar solids	1,000 s tons	76.1	28.1	*56.3
Frozen fruits for further processing	mil lb.	73.3	49.2	*82.8
Frozen vegetables for further processing	do	349.6	131.2	370.3
Fats and oil, all types	do	290.4	68.3	**298.5
Flexible packaging materials, except aluminum	(X)	60.2	(X)	50.6
Containers:				
Paperboard containers, boxes, and corrugated paperboard	(X)	263.8	(X)	195.1
Metal cans	(X)	119.4	(X)	136.5
All other materials, ingredients, containers, and supplies	(X)	864.7	(X)	437.0
Materials, ingredients, containers, and supplies, n.s.k. ²	(X)	69.3	(X)	80.9

1987 CENSUS OF MANUFACTURERS — PRELIMINARY — Continued

Table 3. MATERIALS CONSUMED BY KIND: 1987 and 1982 — Continued

Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry.

Material	1987		1982	
	Quantity ¹	Delivered cost (million dollars)	Quantity ¹	Delivered cost (million dollars)
INDUSTRY 2033, CANNED FRUITS AND VEGETABLES				
Materials, ingredients, containers, and supplies	(X)	5 946.7	(X)	5 384.2
Fresh fruit				
Oranges.....1,000 s tons	1 063.0	230.7	1 895.9	192.9
Apples.....do	977.9	111.6	1 388.2	156.7
Apricots.....do	42.4	12.3	52.6	14.3
Grapes.....do	384.1	82.8	315.3	61.8
Peaches.....do	442.9	97.5	578.5	101.1
Pears.....do	375.2	69.3	310.6	44.3
Pineapples.....do	362.6	53.7	441.7	44.4
Grapefruit.....do	267.8	51.6	**607.0	27.3
Other fresh fruits.....do	376.7	144.3	**429.8	180.4
Fresh vegetables				
Green peas.....1,000 s tons	252.0	60.4	256.7	53.5
White potatoes.....do	118.4	17.6	121.5	9.5
Tomatoes.....do	7 393.4	454.4	6 617.8	449.0
Sweet corn.....do	1 646.3	117.4	1 639.2	94.2
Green or wax beans.....do	427.2	67.8	*448.7	60.8
Mushrooms.....mil lb	83.3	59.7	*113.2	69.6
Other fresh vegetables.....1,000 s tons	997.2	153.6	**1 138.3	108.5
Sweeteners				
High fructose corn syrup in terms of solids (HFCS).....mil lb	705.8	82.0	(X)	(²)
Crystalline fructose (dry fructose).....do	37.5	4.4	(X)	(²)
Dextrose and corn syrup, including corn syrup solids in terms of dry weight.....do	550.4	56.1	(X)	(²)
Sugar (cane and beet) in terms of sugar solids.....1,000 s tons	127.6	59.2	*332.8	126.6
Other materials, ingredients, containers, and supplies				
Dried beans.....1,000 s tons	61.6	15.6	40.4	20.9
Fats and oils, all types.....mil lb	74.9	16.7	**69.9	21.8
Dried fruit.....1,000 s tons	13.7	12.8	31.5	30.4
Concentrated fruit juices.....mil gal	123.4	576.6	*53.4	319.0
Tomato paste (24 percent NTS equivalent).....mil lb	392.2	165.2	412.1	148.2
Frozen fruit (for further processing).....do	195.1	96.7	*81.4	89.2
Frozen vegetables (for further processing).....do	103.7	14.7	5.7	4.4
Printed labels.....(X)	(X)	5.9	(X)	61.3
Flexible packaging materials (including retort pouches).....(X)	(X)	62.0	(X)	50.3
Containers				
Paperboard containers, boxes, and corrugated paperboard.....(X)	(X)	216.9	(X)	145.0
Glass.....1,000 gross	31 482.4	453.2	**22 921.6	419.9
Metal cans.....(X)	(X)	1 079.8	(X)	1 215.9
All other materials, ingredients, containers, and supplies.....(X)	(X)	914.2	(X)	1753.2
Materials, ingredients, containers, and supplies, n.s.k. ².....(X)	(X)	260.0	(X)	309.8
INDUSTRY 2034, DEHYDRATED FRUITS, VEGETABLES, AND SOUPS				
Materials, ingredients, containers, and supplies	(X)	849.9	(X)	900.7
Fresh vegetables.....1,000 s tons	1 334.9	93.4	2 062.5	228.9
Fresh fruits.....do	160.3	42.6	**265.5	27.7
Dried fruits.....do	308.2	311.3	297.0	338.5
Sugar (cane and beet).....do	4.6	2.5	*19.1	8.8
Paperboard containers, boxes, and corrugated paperboard.....(X)	(X)	87.8	(X)	59.7
All other materials, ingredients, containers, and supplies.....(X)	(X)	261.9	(X)	178.5
Materials, ingredients, containers, and supplies, n.s.k. ².....(X)	(X)	50.1	(X)	58.6
INDUSTRY 2035, PICKLES, SAUCES, AND SALAD DRESSINGS				
Materials, ingredients, containers, and supplies	(X)	2 296.7	(X)	2 284.6
Cucumbers.....1,000 s tons	704.3	160.2	*617.0	141.3
Other fresh vegetables.....do	209.0	67.0	**116.9	33.4
Fresh fruits.....do	62.0	15.0	22.8	12.9
Dried fruits.....do	4.4	3.4	4.4	5.5
Corn syrup.....mil lb	392.4	43.9	296.4	32.7
Sugar (cane and beet).....1,000 s tons	196.3	32.5	105.5	53.0
Fats and oils, all types.....mil lb	1 845.1	409.1	1 950.6	482.4
Paperboard containers, boxes, and corrugated paperboard.....(X)	(X)	56.7	(X)	49.5
Glass containers.....1,000 gross	22 400.4	384.4	*16 109.4	350.1
All other materials, ingredients, containers, and supplies.....(X)	(X)	955.0	(X)	968.9
Materials, ingredients, containers, and supplies, n.s.k. ².....(X)	(X)	172.6	(X)	139.9

1987 CENSUS OF MANUFACTURERS — PRELIMINARY — Continued

Table 3. MATERIALS CONSUMED BY KIND: 1987 and 1982 — Continued

Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry.

Material	1987		1982	
	Quantity ¹	Delivered cost (million dollars)	Quantity ¹	Delivered cost (million dollars)
INDUSTRY 2032, CANNED SPECIALTIES				
Materials, ingredients, containers, and supplies	(X)	2 551.7	(X)	2 194.7
Fresh fruit..... 1,000 s tons...	200.3	39.1	110.1	21.0
Fresh vegetables.....	(S)	1.9	*9.5	2.9
Green peas..... 1,000 s tons...	90.2	16.8	83.3	9.8
White potatoes..... do...	405.2	52.9	123.2	9.8
Tomatoes..... do...	5.3	1.2	68.6	4.6
Sweet corn..... do...	37.1	7.2	30.6	5.2
Green or wax beans..... do...	(D)	(D)	(?)	(?)
Mushrooms..... mil lb...	(D)	(D)	*244.5	35.4
Other fresh vegetables..... 1,000 s tons...	(D)	(D)		
Sweeteners.....				
High fructose corn syrup in terms of solids (HFCS)..... mil lb...	*87.8	10.4	(X)	(?)
Crystalline fructose (dry fructose)..... do...	4	2	(X)	(?)
Dextrose and corn syrup, including corn syrup solids in terms of dry weight..... do...	75.1	11.4	(X)	(?)
Sugar (cane and beet) in terms of sugar solids..... 1,000 s tons...	48.7	23.6	*67.7	32.2
Other materials, ingredients, containers, and supplies.....				
Dried beans..... 1,000 s tons...	306.5	146.9	278.7	161.1
Wheat flour..... 1,000 cwt...	1 949.1	19.6	1 536.2	19.5
Fats and oils, all types..... mil lb...	127.9	38.4	74.3	25.8
Fresh, frozen, and prepared meats, other than poultry..... do...	239.0	240.8	196.0	196.9
Dressed poultry..... dressed wt mil lb...	54.9	88.4	40.7	44.6
Tomato paste (24 percent NTS equivalent)..... mil lb...	456.0	186.9	317.1	109.1
Frozen vegetables (for further processing)..... do...	143.9	81.6	77.0	55.7
Printed labels..... (X)	(X)	47.6	(X)	42.2
Flexible packaging materials (including retort pouches)..... (X)	(X)	33.0	(X)	19.3
Containers.....				
Glass..... 1,000 gross...	7 466.1	148.0	**13 247.4	213.1
Paperboard containers, boxes, and corrugated paperboard..... (X)	(X)	91.8	(X)	75.3
Metal cans..... (X)	(X)	502.9	(X)	604.9
All other materials, ingredients, containers, and supplies..... (X)	(X)	552.2	(X)	*434.9
Materials, ingredients, containers, and supplies, n.s.k. ² (X)	(X)	81.8	(X)	71.4
INDUSTRY 2038, FROZEN SPECIALTIES, N.E.C.				
Materials, ingredients, containers, and supplies	(X)	2 501.0	(NA)	(NA)
Fresh fruits..... 1,000 s tons...	2.5	1.7	(NA)	(NA)
Fresh vegetables..... do...	750.2	171.3	(NA)	(NA)
Other materials, ingredients, containers, and supplies.....				
Cheese, natural and processed (including imitation cheese and cheese substitutes)..... mil lb...	260.3	295.1	(NA)	(NA)
Tomato paste (24 percent NTSS equivalent)..... do...	230.1	82.5	(NA)	(NA)
Sugar, cane and beet, in terms of sugar solids..... 1,000 s tons...	25.5	13.6	(NA)	(NA)
Meat (fresh, frozen, or prepared)..... mil lb...	382.8	459.8	(NA)	(NA)
Frozen vegetables for further processing..... do...	217.7	90.8	(NA)	(NA)
Fats and oil, all types..... do...	172.5	44.8	(NA)	(NA)
Wheat flour..... 1,000 cwt...	10 874.9	135.3	(NA)	(NA)
Poultry (live, fresh, or prepared)..... mil lb...	335.8	250.1	(NA)	(NA)
Aluminum packaging material..... (X)	(X)	33.4	(NA)	(NA)
Flexible packaging materials, except aluminum..... (X)	(X)	96.6	(NA)	(NA)
Containers.....				
Paperboard containers, boxes, and corrugated paperboard..... (X)	(X)	287.0	(NA)	(NA)
Metal cans..... (X)	(X)	3.8	(NA)	(NA)
All other materials, ingredients, containers, and supplies..... (X)	(X)	441.2	(NA)	(NA)
Materials, ingredients, containers, and supplies, n.s.k. ² (X)	(X)	93.7	(NA)	(NA)

¹For some establishments, data have been estimated from central unit values which are based on quantity-cost relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: *10 to 19 percent estimated; **20 to 29 percent estimated. If 30 percent or more is estimated,

figure is replaced by (S).

²Total cost of materials of establishments that did not report detailed materials data, including establishments that were not mailed a form.

³For 1982, these materials were included with material code 970099.

Census Data — CONTINUED on page 597